



August 27, 2003

State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Mason  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: Federal 1-11-9-17, 5-11-9-17, 7-11-9-17, 9-11-9-17, 11-11-9-17, and 15-11-9-17.

Dear Diana:

Enclosed find APD's on the above referenced wells. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

RECEIVED

AUG 28 2003

DIV. OF OIL, GAS & MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

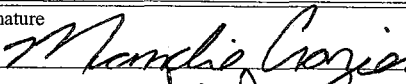
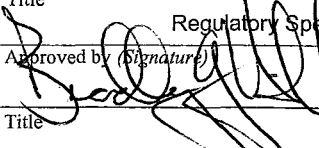
5. Lease Serial No. UTU-79013
6. If Indian, Allottee or Tribe Name N/A
7. If Unit or CA Agreement, Name and No. N/A
8. Lease Name and Well No. Federal 5-11-9-17
9. API Well No. 43-013-32484
10. Field and Pool, or Exploratory Monument Butte
11. Sec., T., R., M., or Blk. and Survey or Area SW/NW Sec. 11, T9S R17E
12. County or Parish Duchesne
13. State UT

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	
2. Name of Operator Inland Production Company	
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area code) (435) 646-3721
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SW/NW 2000' FNL 656' FWL 4433784Y 40.04720 At proposed prod. zone 586272X -109.98045	
14. Distance in miles and direction from nearest town or post office* Approximately 15.3 miles southeast of Myton, Utah	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 640' f/lse, NA f/unit	16. No. of Acres in lease 1,000.00
17. Spacing Unit dedicated to this well 40 Acres	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2811'	19. Proposed Depth 6500'
20. BLM/BIA Bond No. on file #4488944	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5076' GR	22. Approximate date work will start* 4th Quarter 2003
23. Estimated duration Approximately seven (7) days from spud to rig release.	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 8/27/03
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) BRADLEY G. HILL	Date 09-04-03
Title Officer	ENVIRONMENTAL SCIENTIST III	

Federal Approval of this  
Action is Necessary

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

AUG 28 2003

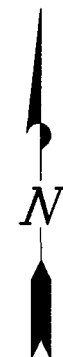
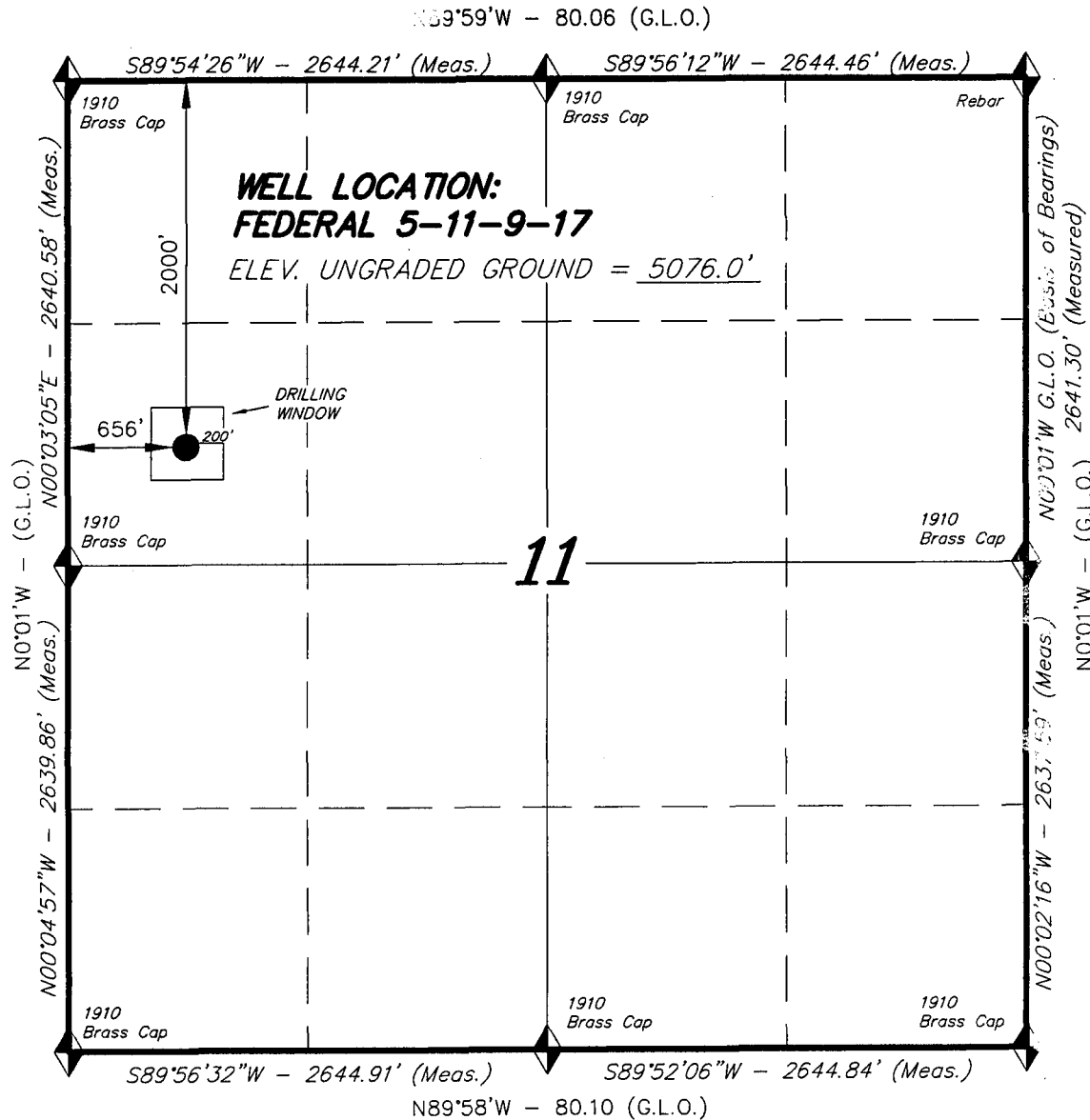
DIV. OF OIL, GAS & MINING



**T9S, R17E, S.L.B.&M.**

**INLAND PRODUCTION COMPANY**

WELL LOCATION, FEDERAL 5-11-9-17,  
LOCATED AS SHOWN IN THE SW 1/4 NW  
1/4 OF SECTION 11, T9S, R17E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF.

*Stacy W. Stewart*  
REGISTERED LAND SURVEYOR  
No. 189377  
STACY W. STEWART  
REGISTRATION No. 189377  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**  
38 WEST 100 NORTH - VERNAL, UTAH 84078  
(435) 781-2501

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

SCALE: 1" = 1000'	SURVEYED BY: K.G.S.
DATE: 7-10-03	DRAWN BY: R.V.C.
NOTES:	FILE #



**INLAND PRODUCTION COMPANY  
FEDERAL #5-11-9-17  
SW/NW SECTION 11, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**DRILLING PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1640'
Green River	1640 '
Wasatch	5825'

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 1640' – 6500' - Oil

**4. PROPOSED CASING PROGRAM**

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Please refer to the Monument Butte Field SOP. See Exhibit "C".

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

Please refer to the Monument Butte Field SOP.

**7. AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Please refer to the Monument Butte Field SOP.

**8. TESTING, LOGGING AND CORING PROGRAMS:**

Please refer to the Monument Butte Field SOP.

**9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered.

**10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

Please refer to the Monument Butte Field SOP.



**INLAND PRODUCTION COMPANY  
FEDERAL #5-11-9-17  
SW/NW SECTION 11, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Inland Production Company well location site Federal #5-11-9-17 located in the SW 1/4 NW 1/4 Section 11, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 10.0 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly - 1.8 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed northeasterly along the proposed access road 270'  $\pm$  to the proposed well location.

**2. PLANNED ACCESS ROAD**

See Topographic Map "B" for the location of the proposed access road.

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

**5. LOCATION AND TYPE OF WATER SUPPLY**

Please refer to the Monument Butte Field SOP. See Exhibit "A".

**6. SOURCE OF CONSTRUCTION MATERIALS**

Please refer to the Monument Butte Field SOP.

**7. METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

**8. ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.



9. **WELL SITE LAYOUT**

See attached Location Layout Diagram.

10. **PLANS FOR RESTORATION OF SURFACE**

Please refer to the Monument Butte Field SOP.

11. **SURFACE OWNERSHIP** - Bureau Of Land Management

12. **OTHER ADDITIONAL INFORMATION**

The Archaeological Resource Survey for this area will be forthcoming. The Paleontological Resource Survey is attached. Paleontological Resource Survey prepared by, Wade E. Miller, 5/8/03. See attached report cover pages, Exhibit "D".

Inland Production Company requests a 60' ROW for the Federal #5-11-9-17 to allow for construction of a 6" gas gathering line, and a 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Inland Production Company also requests a 60' ROW be granted for the Federal #5-11-9-17 to allow for construction of a 3" steel water injection line and a 3" poly water return line. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

Please refer to the Monument Butte Field SOP.

**Reserve Pit Liner**

Please refer to the Monument Butte Field SOP.

**Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Gardner Saltbush	<i>Artiplex gardneri</i>	6 lbs/acre
Galleta grass	<i>Artiplex canescens</i>	6 lbs/acre

13. **LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION**

**Representative**

Name: Brad Mecham  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721



Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of well #5-11-9-17 SW/NW Section 11, Township 9S, Range 17E: Lease UTU-79013 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

8/27/03

Date

Mandie Crozier

Mandie Crozier

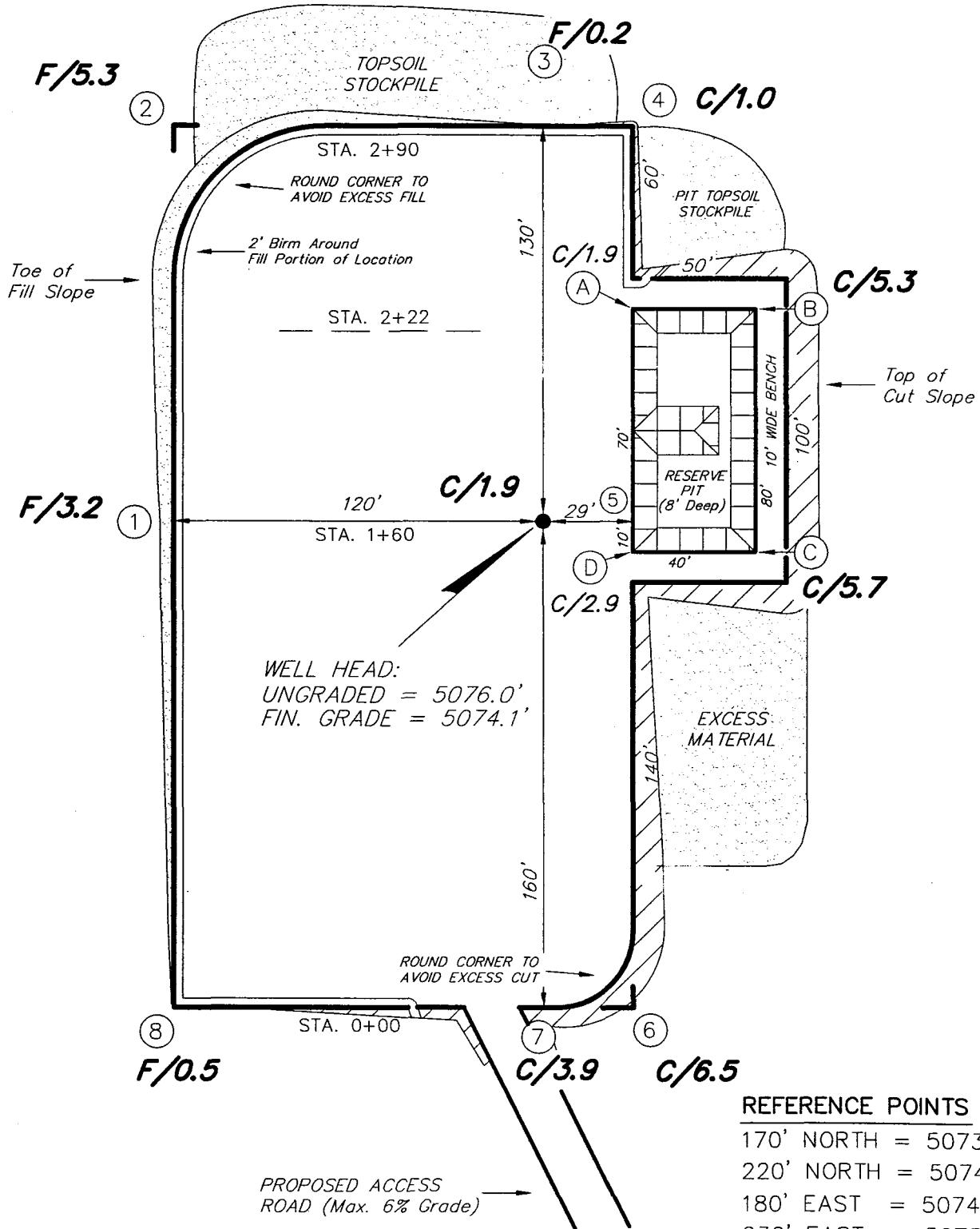
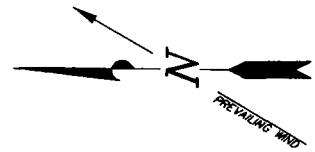
Regulatory Specialist



# INLAND PRODUCTION COMPANY

Federal 5-11-9-17

Section 11, T9S, R17E, S.L.B.&M.



SURVEYED BY: D.J.S.

SCALE: 1" = 50'

DRAWN BY: R.V.C.

DATE: 7-10-03

**Tri State**  
 Land Surveying, Inc.

(435) 781-2501

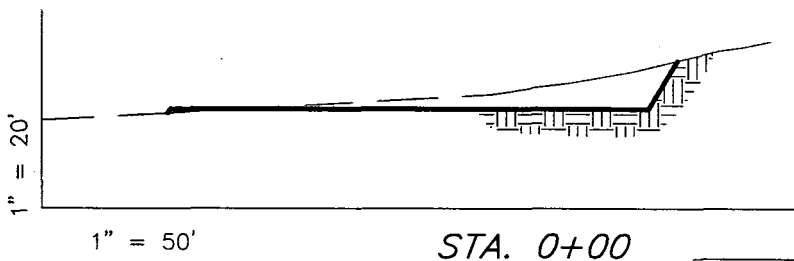
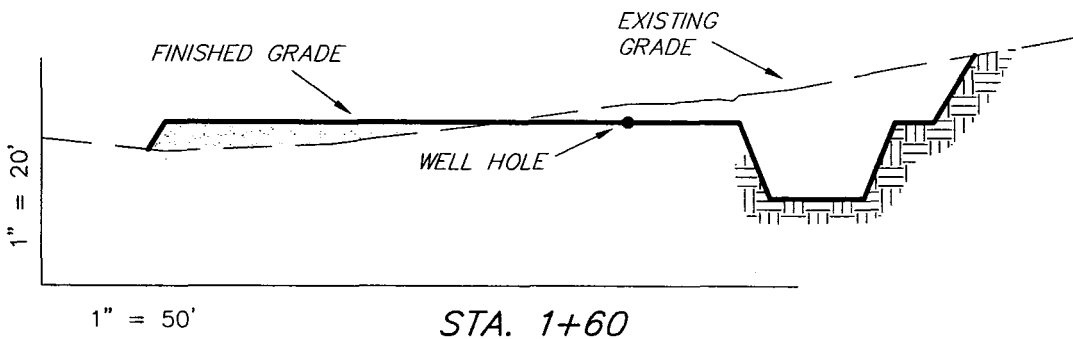
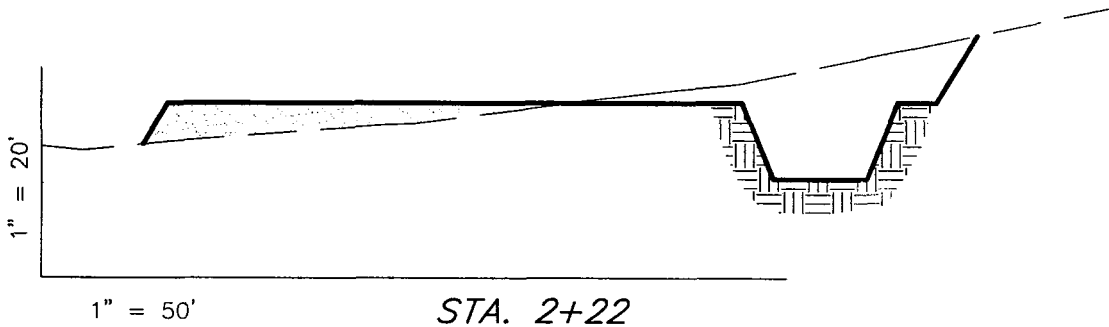
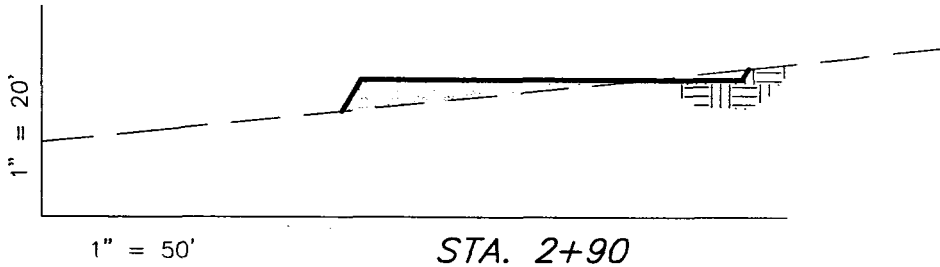
38 WEST 100 NORTH VERNAL, UTAH 84078



# INLAND PRODUCTION COMPANY

## CROSS SECTIONS

Federal 5-11-9-17



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

### ESTIMATED EARTHWORK QUANTITIES

(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	2,260	2,260	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	2,900	2,260	890	640

SURVEYED BY: D.J.S.

SCALE: 1" = 50'

DRAWN BY: R.V.C.

DATE: 7-10-03

**Tri State**  
Land Surveying, Inc.

(435) 781-2501

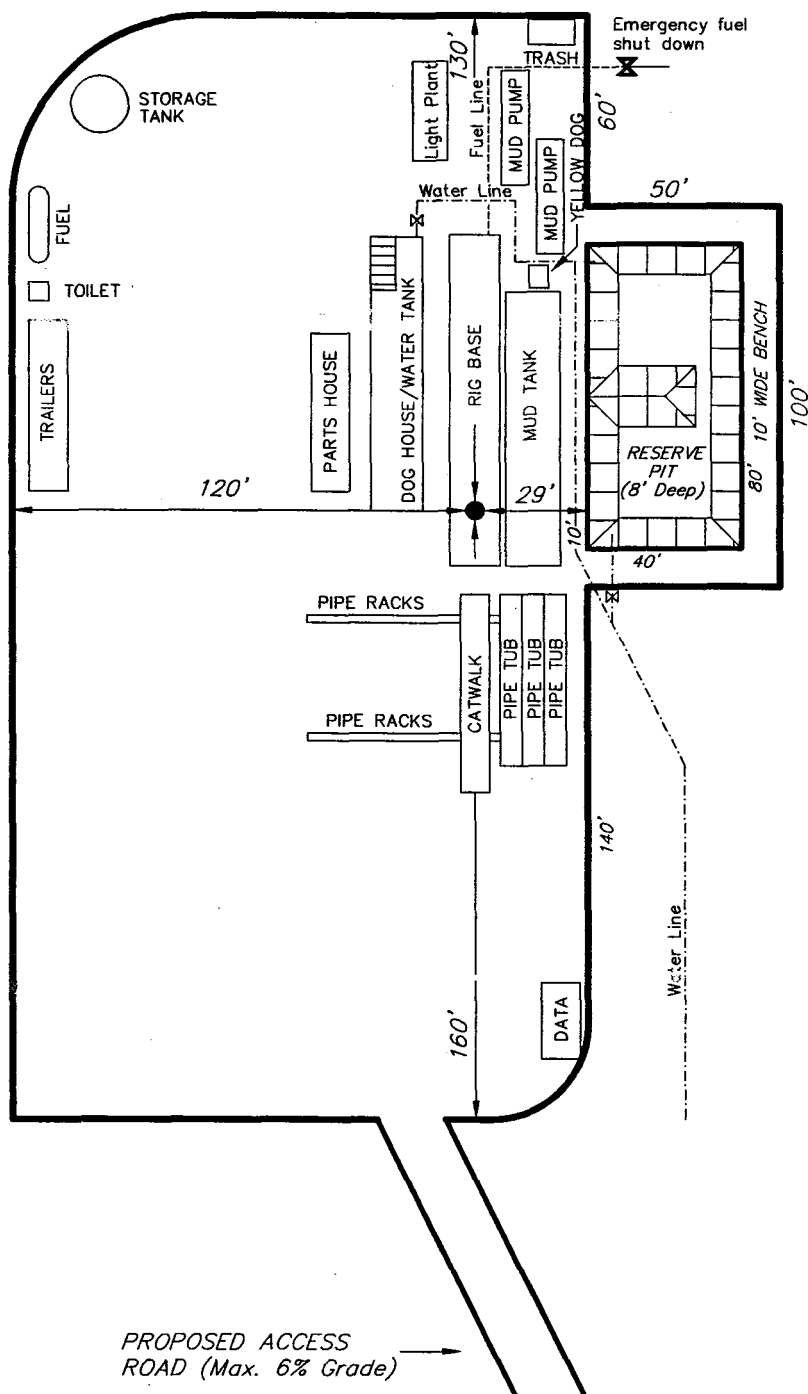
38 WEST 100 NORTH VERNAL, UTAH 84078



# INLAND PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

Federal 5-11-9-17



SURVEYED BY: D.J.S.

SCALE: 1" = 50'

DRAWN BY: R.V.C.

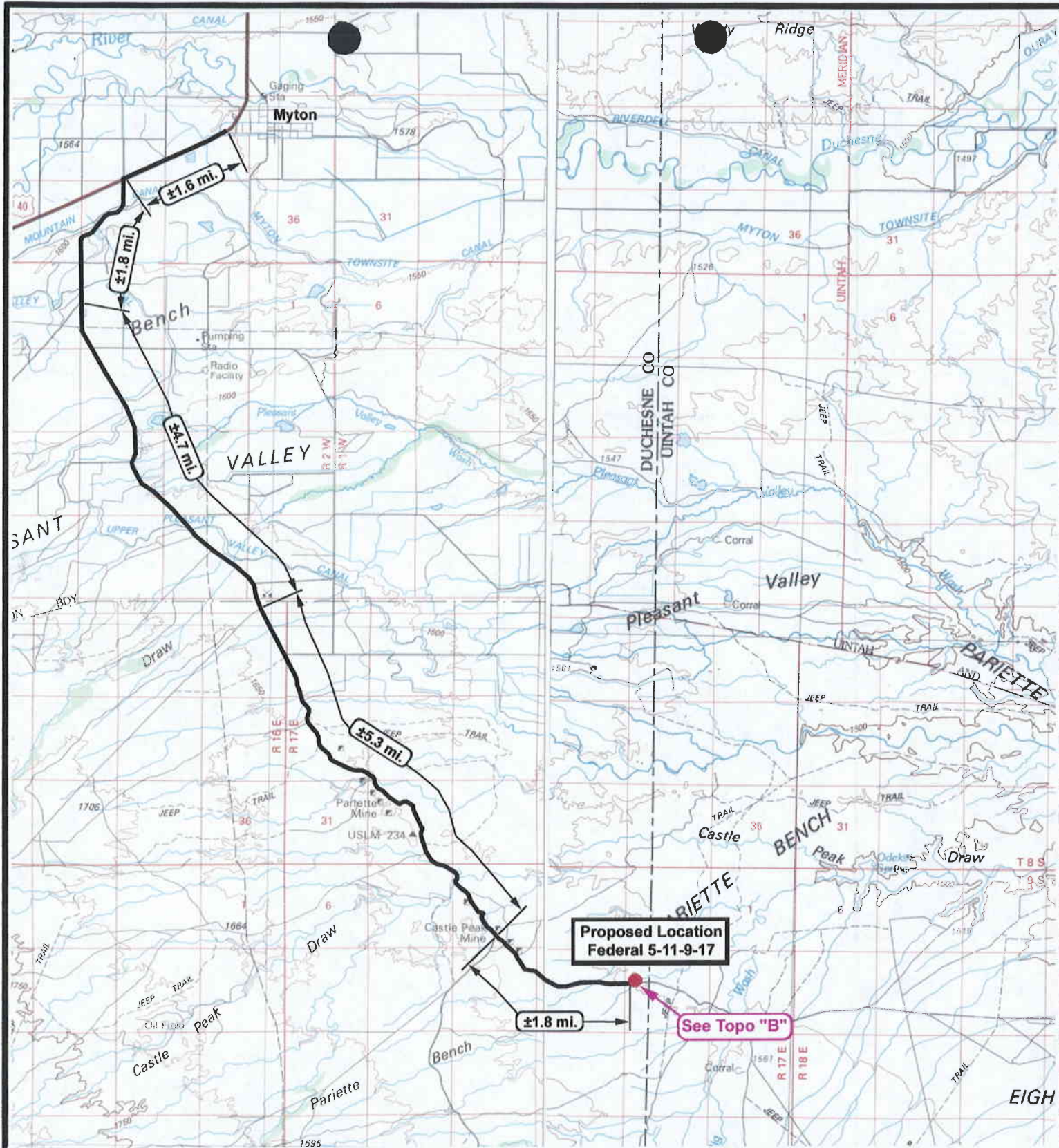
DATE: 7-10-03

**Tri State**  
Land Surveying, Inc.

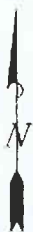
(435) 781-2501

38 WEST 100 NORTH VERNAL, UTAH 84078





**Federal 5-11-9-17**  
**SEC. 11, T9S, R17E, S.L.B.&M.**



**Tri-State**  
**Land Surveying Inc.**  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 = 100,000  
 DRAWN BY: R.A.B.  
 DATE: 07-15-2003

**Legend**

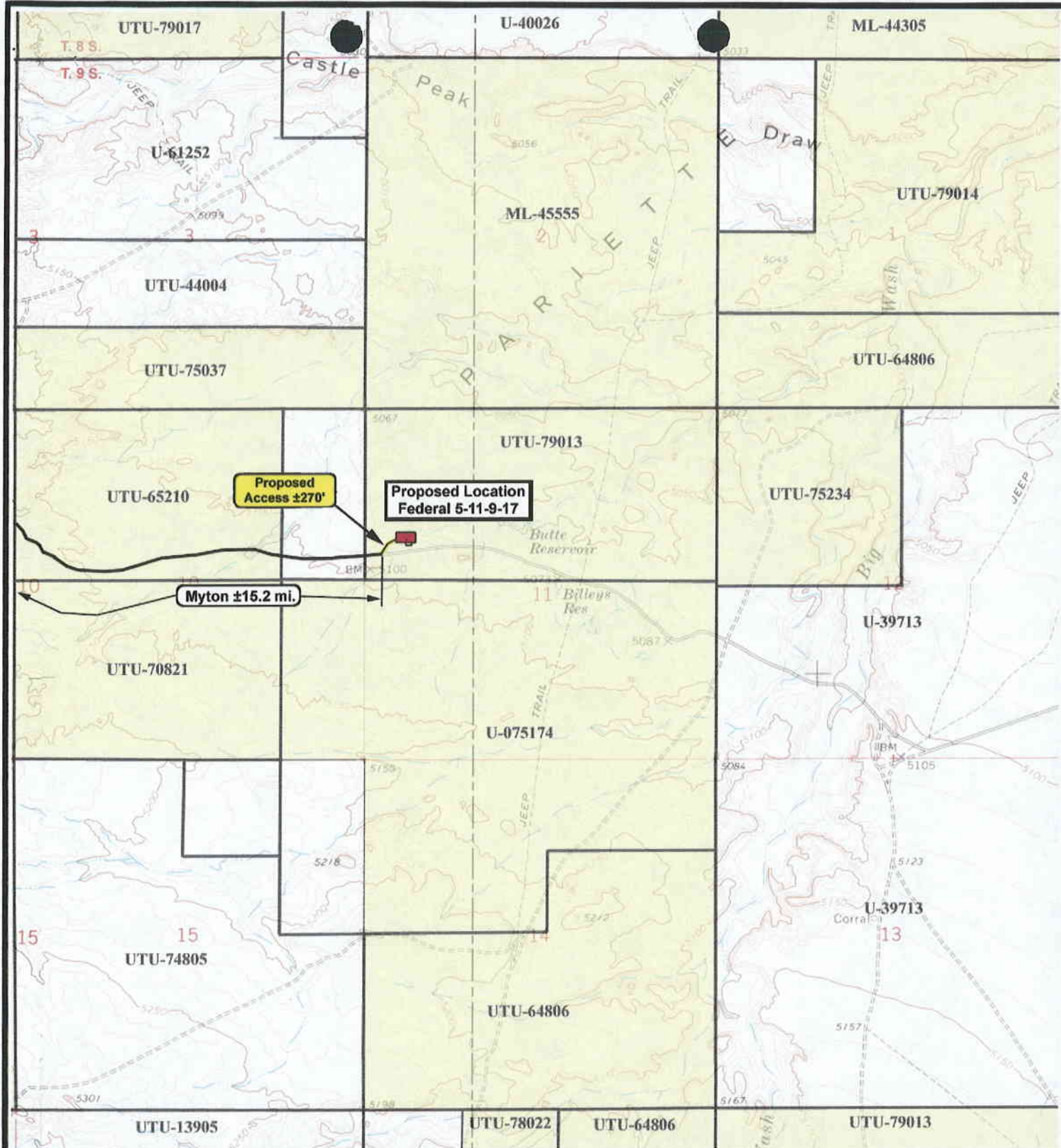
Existing Road

Proposed Access

TOPOGRAPHIC MAP

**"A"**





**Federal 5-11-9-17**  
**SEC. 11, T9S, R17E, S.L.B.&M.**



**Tri-State**  
**Land Surveying Inc.**  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

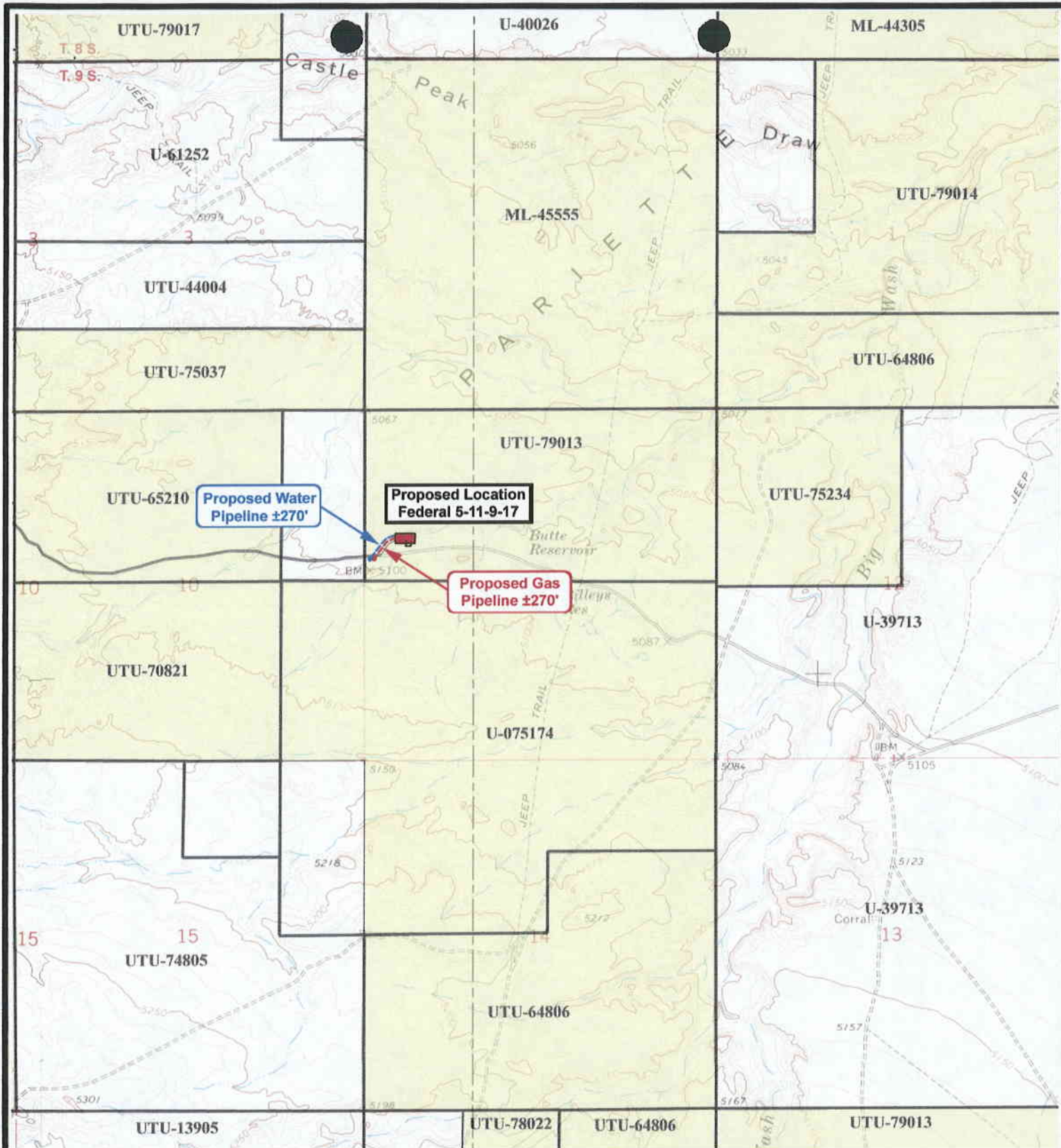
SCALE: 1" = 2,000'  
 DRAWN BY: R.A.B.  
 DATE: 07-15-2003

**Legend**  
 Existing Road  
 Proposed Access

TOPOGRAPHIC MAP

**"B"**





**Federal 5-11-9-17**  
**SEC. 11, T9S, R17E, S.L.B.&M.**



**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
 DRAWN BY: R.A.B.  
 DATE: 07-15-2003

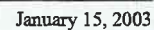
**Legend**

— Roads  
 - - - Proposed Gas Line  
 - - - Proposed Water Line

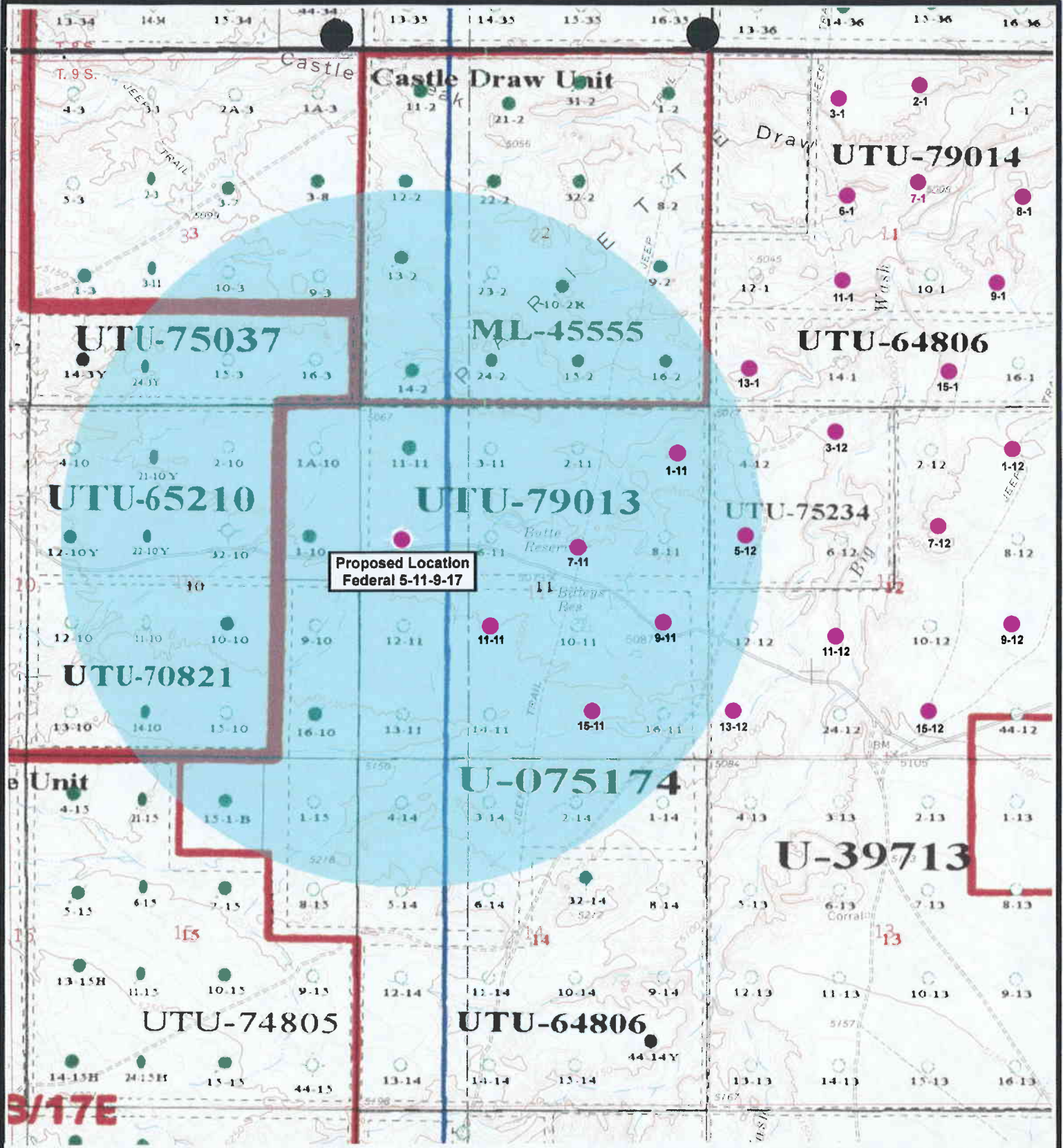
TOPOGRAPHIC MAP

**"C"**









**Federal 5-11-9-17**  
**SEC. 11, T9S, R17E, S.L.B.&M.**



**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
 DRAWN BY: R.A.B.  
 DATE: 07-15-2003

**Legend**

- Well Locations
- One-Mile Radius

**Exhibit "B"**



# 2-M SYSTEM

Blowout Prevention Equipment Systems

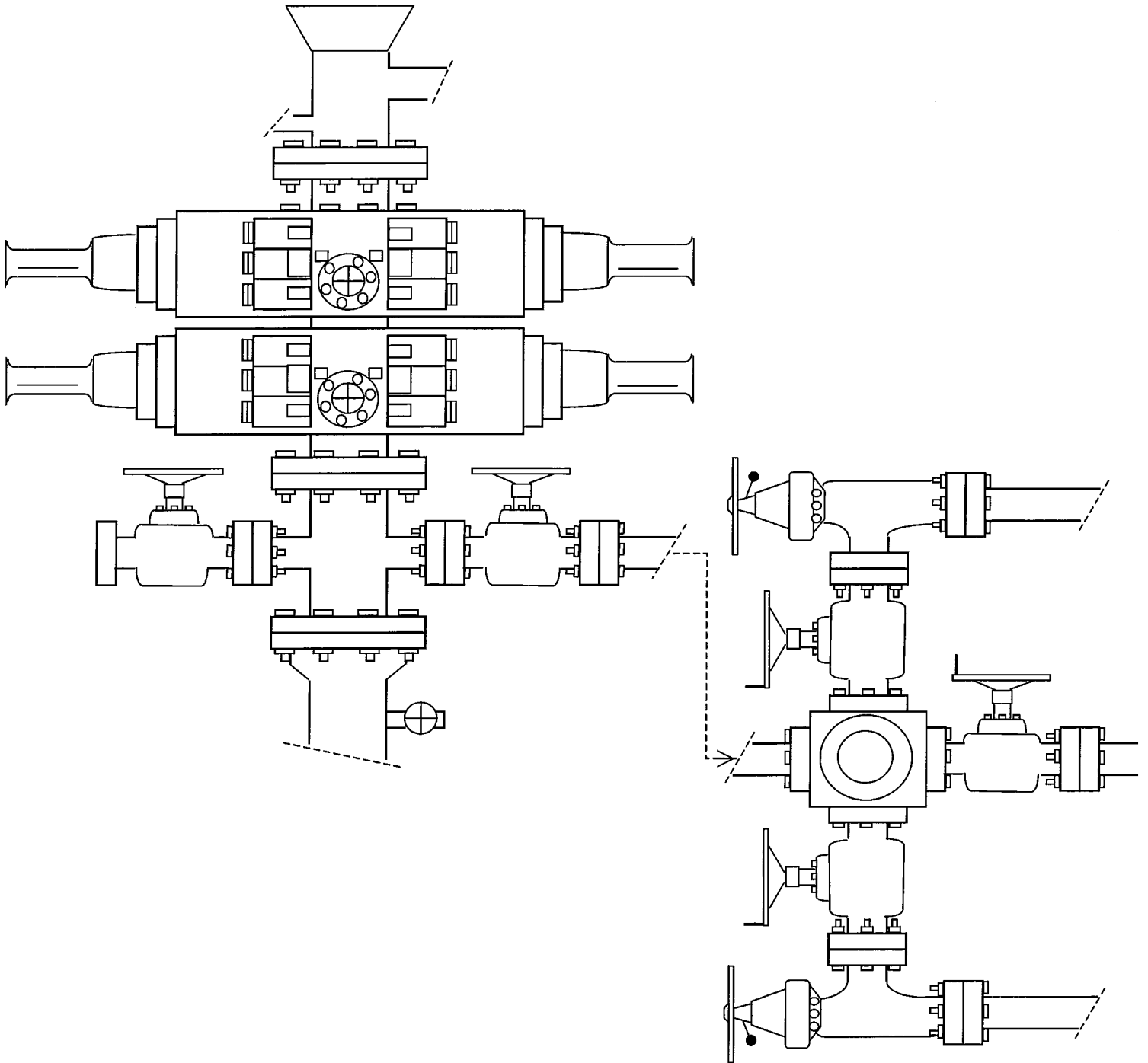


EXHIBIT C



Exhibit "D"

**INLAND RESOURCES, INC.**

**PALEONTOLOGICAL FIELD SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
DUCHESNE AND Uintah COUNTIES, UTAH**

(South ½ Section 6, T 9 S, R 18 E; South ½ Section 1, T 9 S, R 17 E;  
all of Sections 11 and 12, the NW, SE & NE quarters of the SW ¼ Section 10,  
the NE ¼ & SE ¼ of the SE ¼ Section 9, T 9 S, R 17 E and the SE ¼, SW ¼,  
NE ¼ and SE ¼ of the SE ¼, Section 33, T 8 S, R 17 E.)

**REPORT OF SURVEY**

Prepared for:

**Inland Resources, Inc.**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
May 8, 2003



003

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/28/2003

API NO. ASSIGNED: 43-013-32486

WELL NAME: FEDERAL 5-11-9-17

OPERATOR: INLAND PRODUCTION ( N5160 )

CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

## PROPOSED LOCATION:

SWNW 11 090S 170E

SURFACE: 2000 FNL 0656 FWL

BOTTOM: 2000 FNL 0656 FWL

DUCHESNE

MONUMENT BUTTE ( 105 )

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-79013

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 40.04720

LONGITUDE: 109.98045

## RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. 4488944 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. MUNICIPAL )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)

## LOCATION AND SITING:

\_\_\_ R649-2-3.  
Unit \_\_\_  
☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
\_\_\_ R649-3-3. Exception  
\_\_\_ Drilling Unit  
Board Cause No: \_\_\_  
Eff Date: \_\_\_  
Siting: \_\_\_  
\_\_\_ R649-3-11. Directional Drill

COMMENTS:

*Sop, Separate file*

STIPULATIONS:

*1- Federal Approval  
2- Spacing Sop*









# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone

(801) 359-3940 fax

(801) 538-7223 TTY

[www.nr.utah.gov](http://www.nr.utah.gov)

Michael O. Leavitt  
Governor

Robert L. Morgan  
Executive Director

Lowell P. Braxton  
Division Director

September 4, 2003

Inland Production Company  
Route #3, Box 3630  
Myton, UT 84052

Re: Federal 5-11-9-17 Well, 2000' FNL, 656' FWL, SW NW, Sec. 11, T. 9 South, R. 17 East,  
Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-32486.

Sincerely,

A handwritten signature in black ink, appearing to read 'John R. Baza'.

John R. Baza  
Associate Director

pab  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office



**Operator:** Inland Production Company  
**Well Name & Number** Federal 5-11-9-17  
**API Number:** 43-013-32486  
**Lease:** UTU-79013

**Location:** SW NW **Sec.** 11 **T.** 9 South **R.** 17 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.**

**5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.**



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

AUG 28 2003  
BLM VERNAL, UTAH

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

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12. County or Parish Duchesne
13. State UT

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16. No. of Acres in lease 1,000.00
17. Spacing Unit dedicated to this well 40 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 2811'
19. Proposed Depth 6500'
20. BLM/BIA Bond No. on file #4488944
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5076' GR
22. Approximate date work will start* 4th Quarter 2003
23. Estimated duration Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Mandie Crozier</i>	Name (Printed/Typed) Mandie Crozier	Date 8/27/03
Title Regulatory Specialist		
Approved by (Signature) <i>Kirk Fulwood</i>	Name (Printed/Typed) Kirk Fulwood	Date 6/23/04
ACTING Title Assistant Field Manager Mineral Resources	Office	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED  
JUN 28 2004  
DIV. OF OIL, GAS & MINING

2006M  
NOTICE OF APPROVAL

04JIM0825A  
CONDITIONS OF APPROVAL ATTACHED



CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Inland Production Company  
Well Name & Number: FEDERAL 5-11-9-17  
API Number: 43-013-32486  
Lease Number: UTU - 79013  
Location: SWNW Sec. 11 TWN: 09S RNG: 17E  
Agreement: N/A

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.



### CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

**Submit an electronic copy of all logs run on this well in LAS format. This submission will replace the requirement for submittal of paper logs to the BLM.**

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Casing Program and Auxiliary Equipment

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Green River Formation, identified at  $\pm 2,421$  ft.



**CONDITIONS OF APPROVAL**  
**FOR THE SURFACE USE PROGRAM OF THE**  
**APPLICATION FOR PERMIT TO DRILL**

Company/Operator: Inland Production Company.

API Number: 43-013-32486

Well Name & Number: Federal 5-11-9-17

Lease Number: U-79013

Location: SWNW Sec. 11 T. 9 S. R. 17 E.

Surface Ownership: BLM

Date NOS Received: None

Date APD Received: 8-28-03

-A certified paleontologist shall be present to monitor the construction of this well location.

-The reserve pit shall be lined because of its location next to Butte Reservoir.



(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

008

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

**SUBMIT IN TRIPLICATE**

## 1. Type of Well

☒ Oil Well    ☐ Gas Well    ☐ Other

## 2. Name of Operator

**INLAND PRODUCTION COMPANY**

## 3. Address and Telephone No.

**Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721**

## 4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**2000 FNL 656 FWL SW/NW Section 11, T9S R17E**

5. Lease Designation and Serial No.

**UTU-79013**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**N/A**

8. Well Name and No.

**FEDERAL 5-11-9-17**

9. API Well No.

**43-013-32486**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**DUCHESNE COUNTY, UT.**

## 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

## TYPE OF SUBMISSION

☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

## TYPE OF ACTION

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other **Permit Extension**

☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Inland Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 9/4/03 (expiration 9/4/04).

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: **08-30-04**By: **[Signature]****RECEIVED****AUG 24 2004****DIV. OF OIL, GAS & MINING**

COPY SENT TO OPERATOR

Date:

Initials:

**8-31-04**  
**CM**

14. I hereby certify that the foregoing is true and correct

Signed

**Mandie Crozier**

Title

**Regulatory Specialist**

Date

**8/27/04**

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

CC: Utah DOGM

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-013-32486  
**Well Name:** Federal 5-11-9-17  
**Location:** SW/NW Section 11, T9S R17E  
**Company Permit Issued to:** Inland Production Company  
**Date Original Permit Issued:** 9/4/2003

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒ NA

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

Mandie Crozier  
Signature

8/27/2004

Date

Title: Regulatory Specialist

Representing: Inland Production Company



**DIVISION OF OIL, GAS AND MINING****SPUDDING INFORMATION**Name of Company: INLAND PRODUCTION COMPANYWell Name: FEDERAL 5-11-9-17Api No: 43-013-32486 Lease Type: FEDERALSection 11 Township 09S Range 17E County DUCHESNEDrilling Contractor EAGLE RIG # 1**SPUDDED:**Date 08/25/04Time 12:00 NOONHow DRY**Drilling will commence:** \_\_\_\_\_Reported by RAY HERRERATelephone # 1-435-823-1990Date 08/26/2004 Signed CHD



007

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM - FORM 6

OPERATOR: **INLAND PRODUCTION COMPANY**  
ADDRESS: **RT. 3 BOX 3630**  
**MYTON, UT 84052**

OPERATOR ACCT. NO. **N5160**

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	14283	43-013-32440	Ashley Federal 14-15-9-15	SE/SW	15	9S	15E	Duchesne	August 23, 2004	8/31/04
WELL 1 COMMENTS: <i>GRRU</i>											
A	99999	14284	43-013-32471	Ashley Federal 10-15-9-15	NW/SE	15	9S	15E	Duchesne	August 25, 2004	8/31/04
WELL 2 COMMENTS: <i>GRRU</i>											
A	99999	14285	43-013-32486	Federal 5-11-9-17	SW/NW	11	9S	17E	Duchesne	August 25, 2004	8/31/04
WELL 3 COMMENTS: <i>GRRU</i>											
A	99999	14286	43-013-32473	Ashley Federal 15-15-9-15	SW/SE	15	9S	15E	Duchesne	August 27, 2004	8/31/04
WELL 4 COMMENTS: <i>GRRU</i>											
A	99999	14287	43-047-35159	Federal 11-11-9-17	NE/SW	11	9S	17E	Uintah	August 30, 2004	8/31/04
WELL 5 COMMENTS: <i>GRRU</i>											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/99)

RECEIVED

AUG 31 2004

DIV. OF OIL, GAS & MINING

*Kablie S. Jones*  
Signature  
Kablie S. Jones  
Production Clerk  
August 31, 2004  
Date

PAGE 02

INLAND

4356463031

08/31/2004 10:43



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

009

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

INLAND PRODUCTION COMPANY

3. Address and Telephone No.

Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

2000 FNL 656 FWL SW/NW Section 11, T9S R17E

5. Lease Designation and Serial No.

UTU-79013

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.

FEDERAL 5-11-9-17

9. API Well No.

43-013-32486

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE COUNTY, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Spud Notice

☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is direction-ally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

On 08/25/04 MIRU EDSI ES Rig#1 .Spud well @ 12:00 PM Drill 310' of 12 1/4 hole with air mist, TIH w/7 Jts 8 5/8 J55 24# csgn. Set @ 309.69'./KB. On 08/27/04. Cement with 150 sks of Class "G" w/ 2% CaCL2 + 1/4# sk Cello-Flake Mixed @ 15.8 ppg > 1.17 cf/sk yeild. 3 bbls cement returned to surface. WOC.

14. I hereby certify that the foregoing is true and correct

Signed

Floyd Mitchell  
Floyd Mitchell

Title

Drilling Foreman

Date

08/29/04

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

RECEIVED

Date

Conditions of approval, if any:

AUG 31 2004

CC: Utah DOGM



# INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 309.69

LAST CASING 8 5/8" SET AT 309.69'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 310' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Inland Production Company  
 WELL Federal 5-11-9-17  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # EDSI ES#1

## LOG OF CASING STRING:

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		42.53' SH jt					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	299.84
		GUIDE shoe			8rd	A	0.9
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			301.69
TOTAL LENGTH OF STRING		301.69	7	LESS CUT OFF PIECE			4
LESS NON CSG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		0		CASING SET DEPTH			309.69
TOTAL		299.84	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		299.84	7				
TIMING		1ST STAGE					
BEGIN RUN CSG. Spud		8/25/2004	12:00 PM	GOOD CIRC THRU JOB			Yes
CSG. IN HOLE		8/27/2004	11:00 AM	Bbls CMT CIRC TO SURFACE			3BBLs
BEGIN CIRC		8/27/2004	4:34 PM	RECIPROCATED PIPE I N/A			
BEGIN PUMP CMT		8/27/2004	4:41 PM	DID BACK PRES. VALVE HOLD ?			N/A
BEGIN DSPL. CMT		8/27/2004	16:51	BUMPED PLUG TO			Did not bump plug PSI
PLUG DOWN		8/27/2004	4:56 PM				
CEMENT USED		CEMENT COMPANY- B. J.					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	150	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield					
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING				
Centralizers - Middle first, top second & third for 3							

COMPANY REPRESENTATIVE Floyd Mitchell

DATE 8/29/04

RECEIVED  
 AUG 31 2004  
 DIV. OF OIL, GAS & MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Newfield Production Company

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone No. (include are code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2000 FNL 656 FWL

SW/NW Section 11 T9S R17E

5. Lease Serial No.

UTU79013

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

FEDERAL 5-11-9-17

9. API Well No.

4301332486

10. Field and Pool, or Exploratory Area  
Monument Butte

11. County or Parish, State

Duchesne, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report _____
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Status report for time period 09/21/04 – 10/04/04

Subject well had completion procedures initiated in the Green River formation on 09/21/04 without the use of a service rig over the well. A cement bond log was run and a total of four Green River intervals were perforated and hydraulically fracture treated w/ 20/40 mesh sand. Perf intervals were #1 (5422-5432'), (5360-5380') (all 4 JSPF); #2 (4987-4983'), (4978-4991') (all 4 JSPF); #3 (4673-4696') (4 JSPF); #4 (4028-4036'), (4016-4022'), (4001-4006') (ALL 4 JSPF). Composite flow-through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved on well on 9/30/04. Bridge plugs were drilled out. Well was cleaned out to PBTD @ 5757'. Zones were swab tested for sand cleanup. A BHA & production tbg string were run in and anchored in well. End of tubing string @ 5490.47'. A new 1 1/2" bore rod pump was run in well on sucker rods. Well was placed on production via rod pump on 10/04/04.

RECEIVED  
OCT 06 2004  
DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct

Name (Printed/Typed)  
Renee Palmer

Signature

Title

Production Clerk

Date

10/5/2004

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Office

Date

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

**COPY**



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**COPY**

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

011

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Newfield Production Company

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone No. (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2000 FNL 656 FWL

SW/NW Section 11 T9S R17E

5. Lease Serial No.

UTU79013

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

FEDERAL 5-11-9-17

9. API Well No.

4301332486

10. Field and Pool, or Exploratory Area  
Monument Butte

11. County or Parish, State

Duchesne, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 9-03-04 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 267'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 5,582'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 137 jt's of 5.5 J-55, 15.5# csgn. Set @ 5795.78' / KB. Cement with 285 sks cement mixed @ 11.0 ppg & 3.43 yld. Then 375 sks cement mixed @ 14.4 ppg & 1.24 yld. With 15 bbls cement returned to pit. Nipple down Bop's. Drop slips @ 65,000 #s tension. Release rig 8:00 pm on 9-9-04.

RECEIVED

OCT 08 2004

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct

Name (Printed/ Typed)  
Ray Herrera

Title

Drilling Foreman

Signature

*Ray Herrera*

Date

10/7/2004

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

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(Instructions on reverse)



# INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 5795.78

LAST CASING 8 5/8" Set @ 300'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING 12  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TO DRILLER 5810' LOGGER 5808'  
 HOLE SIZE 7 7/8"

Flt cllr @ 5759  
 OPERATOR Inland Production Company  
 WELL Federal 5-11-9-17  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # NDSI rig 2

## LOG OF CASING STRING:

LOG OF CASING STRING:								
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH	
		Landing Jt					14	
		Short jt' 715' @ 4085.32						
137	5 1/2"	IPS LT & C casing	15.5#	J-55	8rd	A	5745.03	
		Float collar					0.6	
1	5 1/2"	Maverick LT&C csg	15.5#	J-55	8rd	A	37.5	
		GUIDE shoe			8rd	A	0.65	
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING				5797.78
TOTAL LENGTH OF STRING		5797.78	138	LESS CUT OFF PIECE				14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG				12
PLUS FULL JTS. LEFT OUT		171.83	4	CASING SET DEPTH				5795.78

TOTAL CSG. DEL. (W/O THRDS)	5954.36	142	} COMPARE	
TIMING	1ST STAGE	2nd STAGE		
BEGIN RUN CSG.	9:00am		GOOD CIRC THRU JOB	yes
CSG. IN HOLE	12:00pm		Bbls CMT CIRC TO SURFACE	15 bbls to pit
BEGIN CIRC	12:30 PM		RECIPROCATED PIPE IN/A	THRUSTROKE
BEGIN PUMP CMT	2:44pm		DID BACK PRES. VALVE HOLD ?	Yes
BEGIN DSPL. CMT	3:40pm		BUMPED PLUG TO	2090 PSI
PLUG DOWN	4:00pm			

CEMENT USED		CEMENT COMPANY- <b>B. J.</b>
STAGE	# SX	CEMENT TYPE & ADDITIVES
1	300	Prem-lite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/4#s/sk Cello Flake .5%SM
		mixed @ 11.0 ppg W / 3.43 cf/sk yield
2	375	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD
CENTRALIZER & SCRATCHER PLACEMENT		SHOW MAKE & SPACING
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.		

COMPANY REPRESENTATIVE Ray Herrera

DATE September 8, 20004



NEWFIELD



RECEIVED

NOV 19 2004

DIV. OF OIL, GAS & MINING

November 9, 2004

State of Utah, Division of Oil, Gas and Mining  
Attn: Ms. Carol Daniels  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Attn: Ms. Carol Daniels

Federal 11-11-9-17 (43-047-35159)  
Uintah County, Utah  
Federal 5-11-9-17 (43-047-32486)  
Uintah County, Utah  
Walker Sand Pass (43-013-31069)  
Duchesne County, Utah  
Beluga 11-7-9-17 (43-013-32284)  
Duchesne County, Utah  
Ashley Fed. 14-15-9-15 (43-013-32440)  
Duchesne County, Utah

Dear Ms. Carol Daniels

Enclosed is a Well Completion or Recompletion Report and Log form (Form 3160-4). We are no longer sending Log copies since Pat Grissom of Phoenix Surveys is already doing so.

If you should have any questions, please contact me at (303) 382-4449.

Sincerely,

Brian Harris  
Engineering Tech

Enclosures

cc: Bureau of Land Management  
Vernal District Office, Division of Minerals  
Attn: Edwin I. Forsman  
170 South 500 East  
Vernal, Utah 84078

Well File – Denver  
Well File – Roosevelt  
Patsy Barreau/Denver  
Bob Jewett/Denver  
Marnie Bryson/Roosevelt



012

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WORK OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		7. UNIT AGREEMENT NAME South Pleasant Valley Area	
1b. TYPE OF WELL NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR. <input type="checkbox"/> Other <input type="checkbox"/>		8. FARM OR LEASE NAME, WELL NO. FEDERAL 5-11-9-17	
2. NAME OF OPERATOR Newfield Exploration		9. WELL NO. 43-013-32486	
3. ADDRESS AND TELEPHONE NO. 1401 17th St. Suite 1000 Denver, CO 80202		10. FIELD AND POOL OR WILDCAT Monument Butte	
4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)* At Surface 2000' FNL & 656' FWL (SWNW) Sec. 11, Twp 9S, Rng 17E At top prod. Interval reported below		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 11, T9S, R17E	
At total depth		14. API NO. 43-013-32486	DATE ISSUED 9/4/2003
15. DATE SPUDDED 8/25/2004		16. DATE T.D. REACHED 9/8/2004	17. DATE COMPL. (Ready to prod.) 10/4/2004
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5076' GR		19. ELEV. CASINGHEAD 5086' KB	
20. TOTAL DEPTH, MD & TVD 5810'		21. PLUG BACK T.D., MD & TVD 5757'	22. IF MULTIPLE COMPL., HOW MANY*
23. INTERVALS DRILLED BY ----->		24. ROTARY TOOLS X	
25. CABLE TOOLS		26. WAS DIRECTIONAL SURVEY MADE No	
27. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* Green River 4001'-5432'		28. WAS WELL CORED No	
29. TYPE ELECTRIC AND OTHER LOGS RUN Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log			
30. CASING RECORD (Report all strings set in well)			
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
8-5/8" - J-55	24#	309'	12-1/4"
5-1/2" - J-55	15.5#	5795'	7-7/8"
31. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
32. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2-7/8"	EOT @ 5490'	TA @ 5322'	
33. PERFORATION RECORD (Interval, size and number)			
INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)
(CP1,2) 5360-80', 5422-32'	.41"	4/120	5360'-5432'
(A1) 4978-83', 4987-91'	.41"	4/36	4978'-4991'
(C-sd) 4673-4696'	.41"	4/92	4673'-4696'
(GB4) 4001-06', 4016-22', 4028-36'	.41"	4/76	4001'-4036'
34. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
AMOUNT AND KIND OF MATERIAL USED			
Frac w/ 48,815# 20/40 sand in 636 bbls fluid.			
Frac w/ 14,525# 20/40 sand in 217 bbls fluid.			
Frac w/ 79,746# 20/40 sand in 586 bbls fluid.			
Frac w/ 92,446# 20/40 sand in 645 bbls fluid.			
35. PRODUCTION			
DATE FIRST PRODUCTION 10/4/2004	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) 2-1/2" x 1-1/2" x 15.5' RHAC Pump		WELL STATUS (Producing or shut-in) PRODUCING
DATE OF TEST 10 day ave	HOURS TESTED	CHOKE SIZE	PROD. FOR TEST PERIOD ----->
64	94	31	1469
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE ----->	OIL-BBL. GAS--MCF. WATER--BBL. OIL GRAVITY-API (CORR.)
36. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold & Used for Fuel			
TEST WITNESSED BY			
37. LIST OF ATTACHMENTS			
38. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED <u>Brian Harris</u>		TITLE <u>Engineering Technician</u>	
DATE <u>11/8/2004</u>		BDH	

\*(See Instructions and Spaces for Additional Data on Reverse Side)



37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);	GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38.
			Well Name Federal 5-11-9-17	NAME
				MEAS. DEPTH
				TRUE VERT. DEPTH
				3534'
				3718'
				3832'
				4095'
				4333'
				4368'
				4493'
				4856'
				5309'
				5724'
				5810'
				Garden Gulch Mkr
				Garden Gulch 1
				Garden Gulch 2
				Point 3 Mkr
				X Mkr
				Y-Mkr
				Douglas Creek Mkr
				BiCarbonate Mkr
				B Limestone Mkr
				Castle Peak
				Basal Carbonate
				Total Depth (LOGGERS)





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov>



IN REPLY REFER TO:  
3106  
(UT-924)

September 16, 2004

### Memorandum

To: Vernal Field Office

From: Acting Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

### Enclosure

1. State of Texas Certificate of Registration

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare



UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
	17424	63073O	74806	76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72613A
02458	26026A	64381	74390	77337	73520X
03563	30096	64805	74391	77338	74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357	76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016	
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		
11385	52013	73086	76240		
13905	52018	73087	76241		
15392	58546	73807	76560		





## Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.



A handwritten signature in black ink, appearing to read "G. Connor".

Secretary of State



ARTICLES OF AMENDMENT  
TO THE  
ARTICLES OF INCORPORATION  
OF  
INLAND PRODUCTION COMPANY

FILED  
In the Office of the  
Secretary of State of Texas

SEP 02 2004  
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE – The name of the corporation is Newfield Production Company."

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs  
Susan G. Riggs, Treasurer



## OPERATOR CHANGE WORKSHEET

013

Change of Operator (Well Sold)

Designation of Agent/Operator

## ROUTING

1. GLH

2. CDW

3. FILE

X Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective:

9/1/2004

**FROM:** (Old Operator):

N5160-Inland Production Company

Route 3 Box 3630

Myton, UT 84052

Phone: 1-(435) 646-3721

**TO:** ( New Operator):

N2695-Newfield Production Company

Route 3 Box 3630

Myton, UT 84052

Phone: 1-(435) 646-3721

CA No.

Unit:

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
FEDERAL 16-20-8-16	20	080S	160E	4301332474		Federal	OW	APD	K
FEDERAL 9-24-8-16	24	080S	160E	4301332359		Federal	OW	APD	K
FENCELINE FED 8-24-8-16	24	080S	160E	4301332360		Federal	OW	APD	K
FENCELINE FED 7-24-8-16	24	080S	160E	4301332361	14399	Federal	OW	DRL	K
FENCELINE FED 6-24-8-16	24	080S	160E	4301332362		Federal	OW	APD	K
FENCELINE FED 3-24-8-16	24	080S	160E	4301332363		Federal	OW	DRL	K
FENCELINE FED 2-24-8-16	24	080S	160E	4301332364		Federal	OW	APD	K
FENCELINE FED 1-24-8-16	24	080S	160E	4301332365		Federal	OW	APD	K
FEDERAL 10-24-8-16	24	080S	160E	4301332366		Federal	OW	APD	K
FEDERAL 13-29-8-16	29	080S	160E	4301332450		Federal	OW	APD	K
FEDERAL 16-30-8-16	30	080S	160E	4301332451		Federal	OW	APD	K
FENCE LINE FED 3-19-8-17	19	080S	170E	4301332370		Federal	OW	APD	K
FENCE LINE FED 4-19-8-17	19	080S	170E	4301332371		Federal	OW	APD	K
FENCE LINE FED 5-19-8-17	19	080S	170E	4301332372	14125	Federal	OW	P	K
FENCE LINE FED 6-19-8-17	19	080S	170E	4301332373	14529	Federal	OW	DRL	K
ASHLEY ST 1-2-9-15	02	090S	150E	4301332436		State	OW	APD	K
ASHLEY ST 8-2-9-15	02	090S	150E	4301332437		State	OW	APD	K
ASHLEY FED 14-15-9-15	15	090S	150E	4301332440	12419	Federal	OW	P	K
GB FED 10-3-9-17	03	090S	170E	4301332184	12391	Federal	OW	P	
FEDERAL 5-11-9-17	11	090S	170E	4301332486	14285	Federal	OW	P	K

## OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/20042. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/20043. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/23/20054. Is the new operator registered in the State of Utah: YES Business Number: 755627-01435. If **NO**, the operator was contacted on:



6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

**DATA ENTRY:**

1. Changes entered in the **Oil and Gas Database** on: 2/28/2005  
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/28/2005  
3. Bond information entered in RBDMS on: 2/28/2005  
4. Fee/State wells attached to bond in RBDMS on: 2/28/2005  
5. Injection Projects to new operator in RBDMS on: 2/28/2005  
6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UT 0056

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 61BSBDH2912

**FEE & STATE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 61BSBDH2919  
2. The **FORMER** operator has requested a release of liability from their bond on: n/a\*  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

\*Bond rider changed operator name from Inland Production Company to Newfield Production Company - **received 2/23/05**





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

June 30, 2005

Newfield Production Company  
Attn: Kelly L. Donohoue  
1401 Seventeenth Street, Suite 1000  
Denver, Colorado 80202

Gentlemen:

The Sundance (Green River) Unit Agreement, Uintah County, Utah, was approved June 30, 2005. This agreement has been designated No. UTU82472X, and is effective July 1, 2005. The unit area embraces 11,143.86 acres, more or less.

Pursuant to regulations issued and effective June 17, 1988, all operations within the Sundance (Green River) Unit will be covered by your nationwide (Utah) oil and gas bond No. 0056.

The following leases embrace lands included within the unit area:

UTU0075174	UTU39713	UTU65970*	UTU79013*
UTU16539*	UTU39714	UTU74404	UTU79014*
UTU16540	UTU44429	UTU74835	UTU80915
UTU17424*	UTU64806*	UTU74872*	UTU82205
UTU18043	UTU65969	UTU75234	

\* Indicates lease to be considered for segregation by the Bureau of Land Management pursuant to Section 18 (g) of the unit agreement and Public Law 86-705.

All lands and interests by State of Utah, Cause No. 228-08 are fully committed.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

RECEIVED

JUL 0 / 2005

DIV. OF OIL, GAS & MINING

*Docket No  
2005-009*



We are of the opinion that the agreement is necessary and advisable in the public interest and for the purpose of more properly conserving natural resources. Certification-Determination, signed by the School and Institutional Trust Land Administration for the State of Utah, is attached to the enclosed agreement. We request that you furnish the State of Utah and all other interested principals with appropriate evidence of this approval.

Sincerely,

/s/ Terry Catlin

Terry Catlin  
Acting Chief, Branch of Fluid Minerals

Enclosure

bcc: Mary Higgins w/enclosure  
MMS - Data Management Division (Attn: James Sykes)  
Trust Lands Administration  
Division of Oil, Gas and Mining  
Field Manager - Vernal w/enclosure  
File - Sundance (Green River) Unit w/enclosure  
Agr. Sec. Chron  
Fluid Chron  
Central Files

UT922:TAThompson:tt:06/30/2005



## Entity Form 6

"C" Change from one existing entity to another existing entity

API	Well	Sec	Twsp	Rng	Entity	Entity Eff Date
4301316218	CASTLE DRAW 16-10-9-17	10	090S	170E	8120 to 14844	9/20/2005
4301330568	FEDERAL 8-10-9-17	10	090S	170E	8000 to 14844	9/20/2005
4301332502	FEDERAL 9-10-9-17	10	090S	170E	14325 to 14844	9/20/2005
4301331593	MON FED 11-11-9-17Y	11	090S	170E	11904 to 14844	9/20/2005
4301332486	FEDERAL 5-11-9-17	11	090S	170E	14285 to 14844	9/20/2005
4301332510	FEDERAL 13-11-9-17	11	090S	170E	14273 to 14844	9/20/2005
4301332544	FEDERAL 12-11-9-17	11	090S	170E	14613 to 14844	9/20/2005
4301332704	FEDERAL 12-14-9-17	14	090S	170E	14786 to 14844	9/20/2005
4301331023	FEDERAL 15-1-B	15	090S	170E	10201 to 14844	9/20/2005
4304734494	FEDERAL 1-31-8-18	31	080S	180E	13927 to 14844	9/20/2005
4304734495	FEDERAL 2-31-8-18	31	080S	180E	13959 to 14844	9/20/2005
4304734496	FEDERAL 3-31-8-18	31	080S	180E	13915 to 14844	9/20/2005
4304734497	FEDERAL 4-31-8-18	31	080S	180E	13942 to 14844	9/20/2005
4304734498	FEDERAL 5-31-8-18	31	080S	180E	13898 to 14844	9/20/2005
4304734499	FEDERAL 6-31-8-18	31	080S	180E	13960 to 14844	9/20/2005
4304734500	FEDERAL 7-31-8-18	31	080S	180E	13925 to 14844	9/20/2005
4304734501	FEDERAL 11-31-8-18	31	080S	180E	13924 to 14844	9/20/2005
4304734502	FEDERAL 12-31-8-18	31	080S	180E	13958 to 14844	9/20/2005
4304734503	FEDERAL 13-31-8-18	31	080S	180E	14324 to 14844	9/20/2005
4304734504	FEDERAL 8-31-8-18	31	080S	180E	13961 to 14844	9/20/2005
4304734930	FEDERAL 10-31-8-18	31	080S	180E	13986 to 14844	9/20/2005
4304734931	FEDERAL 9-31-8-18	31	080S	180E	13963 to 14844	9/20/2005
4304731116	NGC ST 33-32	32	080S	180E	6210 to 14844	9/20/2005
4304732500	STATE 31-32	32	080S	180E	11645 to 14844	9/20/2005
4304732685	SUNDANCE ST 5-32	32	080S	180E	11781 to 14844	9/20/2005
4304732740	SUNDANCE ST 1-32R-8-18	32	080S	180E	11886 to 14844	9/20/2005
4304732741	SUNDANCE ST 3-32	32	080S	180E	12059 to 14844	9/20/2005
4304732827	SUNDANCE ST 4-32	32	080S	180E	12106 to 14844	9/20/2005
4304734458	SUNDANCE 7-32-8-18	32	080S	180E	13987 to 14844	9/20/2005
4304734459	SUNDANCE 8-32-8-18	32	080S	180E	14047 to 14844	9/20/2005
4304734460	SUNDANCE 9-32-8-18	32	080S	180E	13988 to 14844	9/20/2005
4304734461	SUNDANCE 11-32-8-18	32	080S	180E	13962 to 14844	9/20/2005
4304734462	SUNDANCE 12-32-8-18	32	080S	180E	14031 to 14844	9/20/2005
4304734463	SUNDANCE 13-32-8-18	32	080S	180E	13964 to 14844	9/20/2005
4304734464	SUNDANCE 14-32-8-18	32	080S	180E	14046 to 14844	9/20/2005





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
1595 WYNKOOP STREET  
DENVER, CO 80202-1129  
<http://www.epa.gov/region8>

APR 10 2008

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Eric Sundberg  
Newfield Production Company  
1401 Seventeenth Street, Suite 1000  
Denver, CO 80202

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

43 013 32486

Re: Final Permit  
EPA UIC Permit UT21054-07128  
Federal 5-11-9-17  
Duchesne County, Utah

95 17E 11

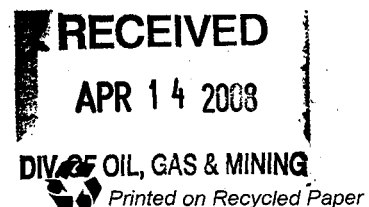
Dear Mr. Sundberg:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Federal 5-11-9-17 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on MAR 9 2008. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C, Subpart 1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit.

This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).





If you have any questions on the enclosed Final Permit or Statement of Basis, please call Emmett Schmitz of my staff at (303) 312-6174, or toll-free at (800) 227-8917, ext. 312-6174.

Sincerely,

*Stephen S. Tuber*  
**FOR RECORD ONLY**

Stephen S. Tuber  
 Assistant Regional Administrator  
 Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit  
 Statement of Basis  
 Form 7520-07 Application to Transfer  
 Form 7520-11 Monitoring Report  
 Form 7520-12 Well Rework Record  
 Form 7520-13 Plugging Record

cc: Letter:

Uintah & Ouray Business Committee, Ute Indian Tribe:  
 Curtis Cesspooch, Chairman  
 Irene Cuch, Vice-Chairwoman  
 Frances Poowegup, Councilwoman  
 Ronald Groves, Councilman  
 Phillip Chimburas, Councilman  
 Steven Cesspooch, Councilman

Chester Mills, Superintendent  
 U.S. Bureau of Indian Affairs  
 Uintah & Ouray Indian Agency

cc: all enclosures:

Michael Guinn  
 District Manager  
 Newfield Production Company  
 Myton, Utah





Shaun Chapoose  
Director  
Land Use Dept.  
Ute Indian Tribe

Gilbert Hunt  
Assistant Director  
State of Utah - Natural Resources

Fluid Minerals Engineering Dept.  
U.S. Bureau of Land Mangement  
Vernal, Utah







**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

**PREPARED: March 2008**

**Permit No. UT21054-07128**

**Class II Enhanced Oil Recovery Injection Well**

**Federal 5-11-9-17  
Duchesne County, UT**

**Issued To**

**Newfield Production Company**  
1401 Seventeenth Street, Suite 1000  
Denver, CO 80202



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## Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company  
1401 Seventeenth Street, Suite 1000  
Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Federal 5-11-9-17  
2000' FNL & 656' FWL, SWNW S11, T9S, R17E  
Duchesne County, UT

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date: **APR 14 2008**

Effective Date **APR 14 2008**



Stephen S. Tuber  
Assistant Regional Administrator\*  
Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.



## **PART II. SPECIFIC PERMIT CONDITIONS**

### **Section A. WELL CONSTRUCTION REQUIREMENTS**

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

#### **1. Casing and Cement.**

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

#### **2. Injection Tubing and Packer.**

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

#### **3. Sampling and Monitoring Devices.**

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
  - (i) on the injection tubing; and
  - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.



#### **4. Well Logging and Testing**

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

#### **5. Postponement of Construction or Conversion**

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

#### **6. Workovers and Alterations**

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

### **Section B. MECHANICAL INTEGRITY**

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).



### **1. Demonstration of Mechanical Integrity (MI).**

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

### **2. Mechanical Integrity Test Methods and Criteria**

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

### **3. Notification Prior to Testing.**

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

### **4. Loss of Mechanical Integrity.**

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.



## **Section C. WELL OPERATION**

**INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.**

Injection is approved under the following conditions:

### **1. Requirements Prior to Commencing Injection.**

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
  - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
  - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

### **2. Injection Interval.**

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

### **3. Injection Pressure Limitation**

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permittee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.



#### **4. Injection Volume Limitation.**

Injection volume is limited to the total volume specified in APPENDIX C.

#### **5. Injection Fluid Limitation.**

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

#### **6. Tubing-Casing Annulus (TCA)**

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

### **Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS**

#### **1. Monitoring Parameters, Frequency, Records and Reports.**

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

#### **2. Monitoring Methods.**

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.



- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

### **3. Records Retention.**

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.
- (c) The Permittee shall retain records at the location designated in APPENDIX D.

### **4. Annual Reports.**

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

## **Section E. PLUGGING AND ABANDONMENT**



### **1. Notification of Well Abandonment, Conversion or Closure.**

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

### **2. Well Plugging Requirements**

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

### **3. Approved Plugging and Abandonment Plan.**

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

### **4. Forty Five (45) Day Notice of Plugging and Abandonment.**

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abandonment plan.

### **5. Plugging and Abandonment Report.**

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

### **6. Inactive Wells.**

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:



- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.



## **PART III. CONDITIONS APPLICABLE TO ALL PERMITS**

### **Section A. EFFECT OF PERMIT**

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

### **Section B. CHANGES TO PERMIT CONDITIONS**

#### ***1. Modification, Reissuance, or Termination.***

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

#### ***2. Conversions.***

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

#### ***3. Transfer of Permit.***

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.



#### **4. Permittee Change of Address.**

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

#### **5. Construction Changes, Workovers, Logging and Testing Data**

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

### **Section C. SEVERABILITY**

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

### **Section D. CONFIDENTIALITY**

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

### **Section E. GENERAL PERMIT REQUIREMENTS**

#### **1. Duty to Comply.**

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.



## **2. Duty to Reapply.**

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

## **3. Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

## **4. Duty to Mitigate.**

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

## **5. Proper Operation and Maintenance.**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

## **6. Permit Actions.**

This Permit may be modified, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

## **7. Property Rights.**

This Permit does not convey any property rights of any sort, or any exclusive privilege.

## **8. Duty to Provide Information.**

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

## **9. Inspection and Entry.**

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;



- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

#### **10. Signatory Requirements.**

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

#### **11. Reporting Requirements.**

- (a) **Planned changes.** The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) **Anticipated noncompliance.** The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Monitoring Reports.** Monitoring results shall be reported at the intervals specified in this Permit.
- (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) **Twenty-four hour reporting.** The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
  - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
  - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.



Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurrence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website <http://www.nrc.uscg.mil/index.htm>.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

## **Section F. FINANCIAL RESPONSIBILITY**

### **1. Method of Providing Financial Responsibility.**

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

### **2. Insolvency.**

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or



- (c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.



## APPENDIX A

### WELL CONSTRUCTION REQUIREMENTS

The Federal No. 5-11-9-17 was drilled to a total depth of 5810 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 310 feet in a 12-1/4 inch hole using 150 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5795 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II and 375 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 1435 feet from the surface. The Cement Bond Log (CBL) identifies top of cement at 130 feet. CBL analysis does identify adequate 80% bond index cement bond within the Confining Zone.

The schematic diagram shows enhanced recovery injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3534 feet and the top of the Wasatch Formation (Estimated to be 5849 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The packer will be set no higher than 100 feet above the top perforation.



UT 21054-07128

Federal #5-11-9-17

S Date: 8/25/04  
 P on Production: 10/04/04  
 G 5076' KB: 5088'

Proposed Injection  
 Wellbore Diagram

Initial Production: BOPID,  
 MCFID, BWPID

## FACE CASING

CN SIZE: 8.58"  
 DE: J-55 Public 92-8756 U.S.D.W. <75'  
 W JTT: 24"  
 LE FTH: 7 jts. (301.69') TOC/CAL 130'  
 DI H LANDED: 309.69' KB  
 DI SIZE: 12.14"  
 CV ENT DATA: 150 sxs Class "C" mixed emt, est 3 bbls emt to surf.

## DUCTION CASING

CN SIZE: 5 1/2" EPA/TOX 1226'  
 DE: J-55 Tirona 1435'  
 W FTH: 15.58' Mahogany Bench 2706'  
 DI FTH: 138 jts. (5797.78') 2756-2770  
 DI H LANDED: 5795.78' KB  
 DI SIZE: 7.78"  
 CV ENT DATA: 300 sxs Prem. Life II mixed & 375 sxs 50/50 POZ mix.  
 CV ENT TOP AT: 40'

## TING

SI GRADE/WT.: 2 7/8" / J-55 / 6.5#  
 NO OF JOINTS: 163 jts (5310.79')  
 TI NG ANCHOR: 5322.79' KB  
 NO OF JOINTS: 3 jts (98.25')  
 SI NG NIPPLE: 2 7/8" (1.10')  
 SI ANDED AT: 5423.79' KB  
 NO OF JOINTS: 2 jts (65.13')  
 TI J. STRING LENGTH: EOT @ 5490.47' w/ 12' KB

## FRAC JOB

9/28/04 5360-5432' Frac CP1 & 2 sands as follows:  
 84.81 50' x 20/40 sand in 630 bbls Lq mg  
 Frac 17 fluid, Treated @ avg press o 90 psi  
 w/avg rate of 24.8 BPM, ISIP 1425 e  
 flush: 5358 gal. Actual flush: 5368  
 9/28/04 4978-4991' Frac A1 sands as follows:  
 14.525# 20/40 sand in 217 bbls Lq mg  
 Frac 17 fluid, Treated @ avg press o 65 psi  
 w/avg rate of 24.8 BPM, ISIP 1750 e  
 flush: 4976 gal. Actual flush: 4977;  
 9/28/04 4673-4696' Frac C sands as follows:  
 79.746# 20/40 sand in 586 bbls Lq mg  
 Frac 17 fluid, Treated @ avg press o 35 psi  
 w/avg rate of 24.8 BPM, ISIP 2000 e  
 flush: 4671 gal. Actual flush: 4670;  
 9/29/04 4001-4036' Frac CB4 sands as follows:  
 92.446# 20/40 sand in 645 bbls Lq mg  
 Frac 17 fluid, Treated @ avg press o 31  
 w/avg rate of 24.7 BPM, ISIP 1850 e  
 flush: 3999 gal. Actual flush: 3931;

3466'-3534' Confining Zone  
 3534' Garden Gulch Mem.

## PERFORATION RECORD

Date	Interval	Tool	Depth	Notes
9/21/04	5422-5432'	4 JSPE	10 h	
9/21/04	5360-5380'	4 JSPE	80 h	
9/28/04	4987-4991'	4 JSPE	16 h	
9/28/04	4978-4983'	4 JSPE	20 h	
9/28/04	4673-4696'	4 JSPE	92 h	
9/28/04	4028-4036'	4 JSPE	32 h	
9/28/04	4016-4022'	4 JSPE	24 h	
9/28/04	4001-4006'	4 JSPE	20 h	

Packer @ 3966'

4001-4006'

4016-4022'

4028-4036'

4673-4696'

4978-4983'

4987-4991'

5360-5380'

5422-5432'

5724' Basal Carbonate  
 Top of Fill & PRTD @ 575'

SHOE @ 5796'

TD @ 5810'

Est. 11/25/2016 5849'

## NEWFIELD

Federal 5-11-9-17  
 2000' ENL & 656' FWL  
 SW NW Section 11-T9S-R17E  
 Duchesne Co. Utah  
 T-43-013-32-486; Lease # T-43-79013



## APPENDIX B

### LOGGING AND TESTING REQUIREMENTS

#### Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

### NO LOGGING REQUIREMENTS

#### Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

<b>WELL NAME:</b> Federal 5-11-9-17	
<b>TYPE OF TEST</b>	<b>DATE DUE</b>
Standard Annulus Pressure	Prior to receiving authorization to inject and at least once within a five (5) year period after the last successful test.
Pore Pressure	Prior to receiving authorization to inject.



# APPENDIX C

## OPERATING REQUIREMENTS

### MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
	ZONE 1 (Upper)
Federal 5-11-9-17	1,040

### INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Federal 5-11-9-17			
FORMATION NAME	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
Green River Formation	3,534.00 - 5,849.00		0.700

### ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

### MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.



## APPENDIX D

### MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Records of all monitoring activities must be retained and made available for inspection at the following location:

**Newfield Production Company**  
**1401 Seventeenth Street - Suite 1000**  
**Denver, CO 80202**



## APPENDIX E

### PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State or local law or regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within sixty (60) days after plugging, the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

**PLUG NO. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 2675 feet to 2820 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 145-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2675 feet to 2820 feet.

**PLUG NO. 3: Seal USDWs:** Squeeze a cement plug (1175 feet - 1275 feet) on the backside of the 5-1/2 inch casing across the base of the Uinta formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 100-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1175 feet to 1275 feet.

**PLUG NO. 4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 360 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface.



## Federal #5-11-9-17

Spud Date: 8/25/04

Put on Production: 10/04/04

GI: 5076' KB: 5088'

Proposed P & A  
Wellbore DiagramInitial Production: BOPI  
MCFD, BWPI

## SURFACE CASING

Casing Size: 8 5/8"

Grade: J-55

Weight: 24#

Length: 7 jts. (301.69')

Depth Landed: 309.69' KB

Hole Size: 12 1/4"

Cement Data: 150 sxs Class "C" mixed cement, est 3 bbls cement to surf.

TOC/LBL 130'

Pump 42 sxs Class G Cement down 5'-1/2" casing to 360'

Casing Shoe @ 310'

360'

## PRODUCTION CASING

Casing Size: 5 1/2"

Grade: J-55

Weight: 15.5#

Length: 138 jts. (5597.78')

Depth Landed: 5795.78' KB

Hole Size: 7 7/8"

Cement Data: 300 sxs Prem. Lite II mixed &amp; 375 sxs 50/50 POZ mix.

Cement Top At: 40'

Green River

1224'

TOC/EPA

1435'

1175'-1275' Cement Plug

2706' Fract

2750'-2770' Mahogany bench

Cement Plug 2675'-2820'

Confining Zone 3466'-3534'  
Garden Gulch Mem 3534'

3488'-3640' 80% bond

20' + Class G Cement plug on top of CIBP  
CIBP 50' above top perforation

4001-4060'

4016-4022'

4028-4036'

4494' Douglas Creek Mem

4673-4696'

4978-4983'

4987-4991'

5360-5380'

5422-5432'

5724' Basal Carbonate  
Top of EBL & BBTD @ 5755'

SHOE @ 5796'

TD @ 5810'

Est. W2524 5849

## NEWFIELD

Federal 5-11-9-17  
2000' ENI & 656' FWL  
SW NW Section 11-T9S-R17E  
Duchesne Co, Utah

API # 43-01332-186 Lease # 111-5013



## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

No corrective action required.



# **STATEMENT OF BASIS**

**NEWFIELD PRODUCTION COMPANY**

**FEDERAL 5-11-9-17**

**DUCHESNE COUNTY, UT**

**EPA PERMIT NO. UT21054-07128**

***CONTACT:*** Emmett Schmitz  
U. S. Environmental Protection Agency  
Ground Water Program, 8P-W-GW  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
Telephone: 1-800-227-8917 ext. 312-6174



This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of injection wells so that the injection does not endanger underground sources of drinking water, governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).



## PART I. General Information and Description of Facility

Newfield Production Company  
1401 Seventeenth Street, Suite 1000  
Denver, CO 80202

on

February 21, 2006

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

Federal 5-11-9-17  
2000' FNL & 656' FWL, SWNW S11, T9S, R17E  
Duchesne County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

The Federal No. 5-11-9-17 is currently an active Green River Formation Garden Gulch and Douglas Creek Members oil well. It is the initial intent of the applicant to use the current production perforations for Class II enhanced recovery injection. The Federal No. 5-11-9-17 has total depth in the Basal Carbonate Member.

**TABLE 1.1**  
**WELL STATUS / DATE OF OPERATION**

NEW WELLS		
Well Name	Well Status	Date of Operation
Federal 5-11-9-17	New	N/A



## PART II. Permit Considerations (40 CFR 146.24)

### Hydrogeologic Setting

Water wells for domestic supply in this area, when present, generally are completed into the shallow alluvium, the Duchesne River Formation, or the underlying Uinta Formation, and the water generally contains approximately 500 to 1,500 mg/l and higher total dissolved solids.

The Uinta-Animas aquifer in the Uinta Basin is present in water-yielding beds of sandstone, conglomerate, and siltstone of the Duchesne River and Uinta Formations, the Renegade Tongue of the Wasatch Formation, and the Douglas Creek Member of the Green River Formation. The Renegade Tongue of the Wasatch Formation and the Douglas Creek Member of the Green River Formation contain an aquifer along the southern and eastern margins of the basin where the rocks primarily consist of fluvial, massive, irregularly bedded sandstone and siltstone. Water-yielding units in the Uinta-Animas aquifer in the Uinta Basin commonly are separated from each other and from the underlying Mesaverde aquifer by units of low permeability composed of claystone, shale, marlstone, or limestone. In the Uinta Basin, for example, the part of the aquifer in the Duchesne River and Uinta Formations ranges in thickness from 0 feet at the southern margin of the aquifer to as much as 9,000 feet in the north-central part of the aquifer. Ground-water recharge to the Uinta-Animas aquifer generally occurs in the areas of higher altitude along the margins of the basin. Ground water is discharged mainly to streams, springs, and by transpiration from vegetation growing along stream valleys. The rate of ground-water withdrawal is small, and natural discharge is approximately equal to recharge. Recharge occurs near the southern margin of the aquifer, and discharge occurs near the White and Green Rivers (from USGS publication HA 730-C). Water samples from Mesaverde sands in the nearby Natural Buttes Unit yielded highly saline water.

### Geologic Setting (TABLE 2.1)

The proposed enhanced oil recovery injection well is located in the Greater Monument Butte Field, T7-9S and R15-19E, which lies near the center of the broad, gently northward dipping south flank of the Uinta Basin. More than 450 million barrels of oil (63 MT) have been produced from sediments of the Uinta Basin. The Uinta Basin is a topographic and structural trough encompassing an area of more than 9300 square mi (14,900 km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin was formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed, sediments deposited in and around Lake Uinta make up the Uintah and Green River Formations. The southern shore of Lake Uinta was very broad and flat, resulting in large cyclic shifts of the location of the shoreline during the many repeated transgressive and regressive cycles caused by the climatic and tectonic-induced rise and fall of water levels of the lake. Distributary-mouth bars, distributary channels, and near-shore bars are the primary oil producing sandstone reservoirs in the area. (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report, 4/1/99-9/30/99", by C. D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103).

The Duchesne River Formation is absent in this area. Shale and siltstone of the Uintah Formation outcrop and compose the surface rock throughout the area. The lower 600 feet to 800 feet of the Uinta Formation, consisting generally of shale interbedded with occasionally water-bearing sandstone lenses between 5 feet to 20 feet thick, is underlain by the Green River Formation. The



Green River Formation is further subdivided into several Member and local marker units. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked, intertonguing deltaic and near-shore sand and silt deposits. Red alluvial shale and siltstone deposits that intertongue with the Green River sediments are of the Colton and Wasatch Formations. Under the Wasatch Formation is the Mesaverde Formation, which consists primarily of continental-origin deposits of interbedded shale, sandstone, and coal.

The geologic dip is about 200 feet per mile, and there are no known surface faults in this area. Veins of gilsonite, a natural resinous hydrocarbon occasionally mined as a resource, occurs in the greater Uintah Basin though it is predominantly found on the eastern margin of the basin near the Colorado border. Vertical veins, generally between 2 ft to 6 ft wide but up to 28 ft wide, may extend many miles in length and occasionally extend as deep as 2000 ft. In this area within the Greater Monument Butte Field there is one known gilsonite vein. This vein is not considered to present a pathway for migration of fluid out of the injection zone because it terminates at depth of about 2000 ft, far above the protective confining layer and much deeper injection zone. Newfield and the owner of this former gilsonite mine have agreed to conditions for operation near this vein to ensure no potential for impact to this vein or to ground water from enhanced oil recovery operations.

**TABLE 2.1**  
**GEOLOGIC SETTING**  
**Federal 5-11-9-17**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0	75	< 10,000	Fluvial sand and shale.
Uinta	75	1,226		Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River	1,226	3,534		Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.
Green River	3,534	5,849	> 10,000	Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.

#### **Proposed Injection Zone(s) (TABLE 2.2)**

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The Environmental Protection Agency (EPA) approved interval for Class II enhanced recovery injection in the Federal No. 5-11-9-17 is located between the top of the Garden Gulch Member (3534 feet) and the top of the Wasatch Formation estimated to be 5849 feet.



**TABLE 2.2**  
**INJECTION ZONES**  
Federal 5-11-9-17

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River Formation	3,534	5,849	> 10,000	0.700		N/A

\* C - Currently Exempted  
E - Previously Exempted  
P - Proposed Exemption  
N/A - Not Applicable

### Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The 68-foot (3466 feet - 3534 feet) shale and argillaceous siltstone Confining Zone directly overlies the Garden Gulch Member.

**TABLE 2.3**  
**CONFINING ZONES**  
Federal 5-11-9-17

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	Shale with some argillaceous siltstone.	3,466	3,534

### Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

Throughout the Greater Monument Butte Field area undergoing enhanced oil recovery operations, water analyses of the Green River Formation generally exhibit total dissolved solids (TDS) content well in excess of 10,000 mg/l. However, some recent water analyses from the field showed lower TDS values closer to 10,000 mg/l. While rain and surface water recharge into Green River Formation outcrops further south along the Book Cliffs/Roan Cliffs in effect "freshens" the Green River Formation water near those outcrops, in this area of the Monument Butte Field the observed occasional 'freshening' is ascribed to the effective dilution of the originally in-place high TDS water from injection of relatively fresh water for enhanced oil recovery operations. Water samples from deeper Mesaverde Formation sands in the nearby Natural Buttes Unit yield highly saline water.

The State of Utah "Water Wells and Springs" identifies no public water supply wells within the one-quarter (1/4) mile Area-of-Review (AOR) around the Federal No. 5-11-9-17.



Technical Publication No. 92: State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation approximately 75 feet from the surface. However, absent definitive information relative to the water quality of the Uinta Formation, from the depth of 75 feet to the base of the Uinta Formation (1226 feet), the EPA will require, during plugging and abandonment, a cement plug at the base of the Uinta Formation to protect contamination of possible Uinta USDWs.

**TABLE 2.4**  
**UNDERGROUND SOURCES OF DRINKING WATER (USDW)**  
**Federal 5-11-9-17**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Fluvial sand and shale.	0	75	< 10,000
Uinta	Interbedded lacustrine sand, shale and carbonate with fluvial sand and shale.	75	1,226	

### PART III. Well Construction (40 CFR 146.22)

The Federal No. 5-11-9-17 was drilled to a total depth of 5810 feet (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 310 feet in a 12-1/4 inch hole using 150 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5795 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II and 375 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDWs.

The EPA calculates the top of cement as 1435 feet from the surface. The Cement Bond Log (CBL) identifies top of cement at 130 feet. CBL analysis does identify adequate 80% bond index cement bond within the Confining Zone.

The schematic diagram shows enhanced recovery injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3534 feet and the top of the Wasatch Formation (Estimated to be 5849 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The packer will be set no higher than 100 feet above the top perforation.



**TABLE 3.1**  
**WELL CONSTRUCTION REQUIREMENTS**  
**Federal 5-11-9-17**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Production	7.88	5.50	0 - 5,810	0 - 5,810
Surface	12.25	8.63	0 - 310	0 - 310

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

#### **Casing and Cementing (TABLE 3.1)**

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

#### **Tubing and Packer**

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

#### **Tubing-Casing Annulus (TCA)**

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required under conditions of the Permit.

#### **Monitoring Devices**

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.



## PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

**TABLE 4.1**  
**AOR AND CORRECTIVE ACTION**

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Federal No. 12-11-9-17	Producer	No	5,755	260	No
Federal No. 6-11-9-17	Producer	No	5,794	90	No
Federal No. 8-10-9-17	Producer	No	6,048	2,500	No
Monument Federal 11-11-9-17	Producer	No	5,700	1,730	No

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

### Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

### Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

## PART V. Well Operation Requirements (40 CFR 146.23)

**TABLE 5.1**  
**INJECTION ZONE PRESSURES**  
**Federal 5-11-9-17**

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River Formation	4,001	0.700	1,040



The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

The proposed injectate will be a blend of culinary water from the Johnson Water District reservoir and/or water via the Green River pipeline, which will be blended with produced Green River water from wells proximate to the Federal No. 5-11-9-17.

### **Injection Pressure Limitation**

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)  
fg = fracture gradient (from submitted data or tests)  
sg = specific gravity (of injected fluid)  
d = depth to top of injection zone (or top perforation)

### **Injection Volume Limitation**

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

There will be no restrictions on the cumulative volume or daily volume of authorized Class II fluid to be injected into the approved Green River Formation interval. The Permittee will not exceed the maximum authorized injection pressure of 1040 psig.

### **Mechanical Integrity (40 CFR 146.8)**

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and



periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

**PART I MI:** Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, whichever is less, with a ten (10) percent or less pressure loss over thirty (30) minutes.

## **PART VI. Monitoring, Recordkeeping and Reporting Requirements**

### **Injection Well Monitoring Program**

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

## **PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)**

### **Plugging and Abandonment Plan**

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State or local law or



regulation. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within sixty (60) days after plugging, the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

**PLUG NO. 1: Seal Injection Zone:** Set a cast iron bridge plug (CIBP) no more than fifty (50) feet above the top injection perforation. Place at least twenty (20) feet of cement plug on top of the CIBP.

**PLUG NO. 2: Seal Mahogany Shale and Trona intervals:** Squeeze a cement plug on the backside of the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale approximately 2675 feet to 2820 feet (unless pre-existing backside cement precludes cement-squeezing this interval) followed by a minimum 145-foot balanced cement plug inside the 5-1/2 inch casing across the Trona Zone and the Mahogany Shale, approximately 2675 feet to 2820 feet.

**PLUG NO. 3: Seal USDWs:** Squeeze a cement plug (1175 feet - 1275 feet) on the backside of the 5-1/2 inch casing across the base of the Uinta formation (unless pre-existing backside cement precludes cement-squeezing this interval), followed by a minimum 100-foot balanced cement plug inside the 5-1/2 inch casing across the base of the Uinta Formation, approximately 1175 feet to 1275 feet.

**PLUG NO.4: Seal Surface:** Set a Class "G" cement plug within the 5-1/2 inch casing to 360 feet and up the 5-1/2 inch by 8-5/8 inch casings annulus to the surface.

## **PART VIII. Financial Responsibility (40 CFR 144.52)**

### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Annual Financial Statement that was reviewed and approved by the EPA December 17, 2007.

Financial Statement, received April 22, 2005

Evidence of continuing financial responsibility is required to be submitted to the Director annually.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

JUN 26 2008

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

Michael Guinn  
District Manager  
Newfield Production Company  
Route 3 - Box 3630  
Myton, UT 84052

9S 17E 11  
RE: **Authority to Commence Injection**  
EPA UIC Permit UT21054-07128  
Federal 5-11-9-17  
Duchesne County, Utah  
API #: 43-013-32486

Dear Mr. Guinn:

Newfield Production Company (Newfield) has satisfactorily completed Environmental Protection Agency (EPA) **Prior to Commencing Injection** requirements for Final Permit, UT210545-07128, effective April 14, 2008. The Part I (Internal) Mechanical Integrity Test (MIT), Well Rework Record (EPA Form No. 7520-12), schematic diagram, and pore pressure, were reviewed and approved by EPA on June 25, 2008.

As of the date of this letter, Newfield is authorized to commence injection into Federal 5-11-9-17 at a maximum allowable injection pressure (MAIP) of **1040 psig**. Until such time as the Permittee demonstrates through a Step Rate Test (SRT) that the Fracture Gradient (FG) is other than 0.700 psi/ft, Federal 5-11-9-17 shall be operated at a MAIP no greater than **1040 psig**.



As of this approval, responsibility for permit compliance and enforcement is transferred to Region 8 UIC Technical Enforcement Program office. Therefore, please direct all monitoring and compliance correspondence to the following address, referencing your well name and UIC Permit number on all correspondence regarding this well to:

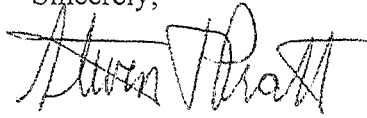
Mr. Nathan Wiser  
Technical Enforcement Program – UIC  
U.S. EPA Region 8: Mail Code 8ENF-UFO  
1595 Wynkoop Street  
Denver, CO 80202-1129

Or, you may reach Mr. Wiser by telephone at 303-312-6211, or 1 800-227-8927, ext. 312-6211.

Please remember that it is your responsibility to be aware of and to comply with all conditions of injection well Permit UT21054-07128.

If you have questions regarding the above action, please call Emmett Schmitz at 303-312-6174 or 1-800-227-8917, ext. 312-6174.

Sincerely,



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

cc: Uintah & Ouray Business Committee, Ute Indian Tribe  
Curtis Cesspooch, Chairman  
Irene Cuch, Vice-Chairwoman  
Ronald Groves, Councilman  
Steven Cesspooch, Councilman  
Phillip Chimburas, Councilman  
Frances Poowegup, Councilwoman

Chester Mills, Superintendent  
BIA - Uintah & Ouray Indian Agency

Shaun Chapoose, Director  
Land Use Department  
Ute Indian Tribe

Gil Hunt  
Assistant Director  
Utah Division of Oil, Gas, and Mining



Felicia Myore, Acting Director  
Energy and Mineral Department

Fluid Minerals Engineering Office  
BLM - Vernal Office

Eric Sundberg  
Regulatory Analyst  
Newfield Production Company



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL:

OIL WELL ☒

GAS WELL ☐

OTHER

WV

2. NAME OF OPERATOR:

NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR:

Route 3 Box 3630

CITY Myton

STATE UT

ZIP 84052

PHONE NUMBER

435.646.3721

4. LOCATION OF WELL:

FOOTAGES AT SURFACE: 2000 FNL 656 FWL

5. LEASE DESIGNATION AND SERIAL NUMBER:

USA UTU-79013

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

SUNDANCE UNIT

8. WELL NAME and NUMBER:

FEDERAL 5-11-9-17

9. API NUMBER:

4301332486

10. FIELD AND POOL, OR WILDCAT:

MONUMENT BUTTE

COUNTY: DUCHESNE

OTR/OTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW, 11, T9S, R17E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ NOTICE OF INTENT  
(Submit in Duplicate)

Approximate date work will

07/16/2008

☐ SUBSEQUENT REPORT  
(Submit Original Form Only)

Date of Work Completion:

☐ ACIDIZE

☐ ALTER CASING

☐ CASING REPAIR

☐ CHANGE TO PREVIOUS PLANS

☐ CHANGE TUBING

☐ CHANGE WELL NAME

☐ CHANGE WELL STATUS

☐ COMMINGLE PRODUCING FORMATIONS

☒ CONVERT WELL TYPE

☐ DEEPEN

☐ FRACTURE TREAT

☐ NEW CONSTRUCTION

☐ OPERATOR CHANGE

☐ PLUG AND ABANDON

☐ PLUG BACK

☐ PRODUCTION (START/STOP)

☐ RECLAMATION OF WELL SITE

☐ RECOMPLETE - DIFFERENT FORMATION

☐ REPERFORATE CURRENT FORMATION

☐ SIDETRACK TO REPAIR WELL

☐ TEMPORARILY ABANDON

☐ TUBING REPAIR

☐ VENT OR FLAIR

☐ WATER DISPOSAL

☐ WATER SHUT-OFF

☒ OTHER: - Change status, put well in injection

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above reference well was put on injection at 10:00 AM on 7-16-08.

UT 21054-07128

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

NAME (PLEASE PRINT) Kathy Chapman

TITLE Office Manager

SIGNATURE

*Kathy Chapman*

DATE 08/04/2008

(This space for State use only)

RECEIVED

AUG 05 2008

DIV. OF OIL, GAS & MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2000 FNL 656 FWL

SWNW Section 11 T9S R17E

5. Lease Serial No.

USA UTU-79013

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

SUNDANCE UNIT

8. Well Name and No.

FEDERAL 5-11-9-17

9. API Well No.

4301332486

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Step Rate Test _____
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

A step rate test was conducted on the subject well on November 13, 2008. Results from the test indicate that the fracture gradient is .704 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed to 1055 psi.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Cheyenne Bateman

Signature



Title

Well Analyst Foreman

Date

11/17/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by \_\_\_\_\_

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

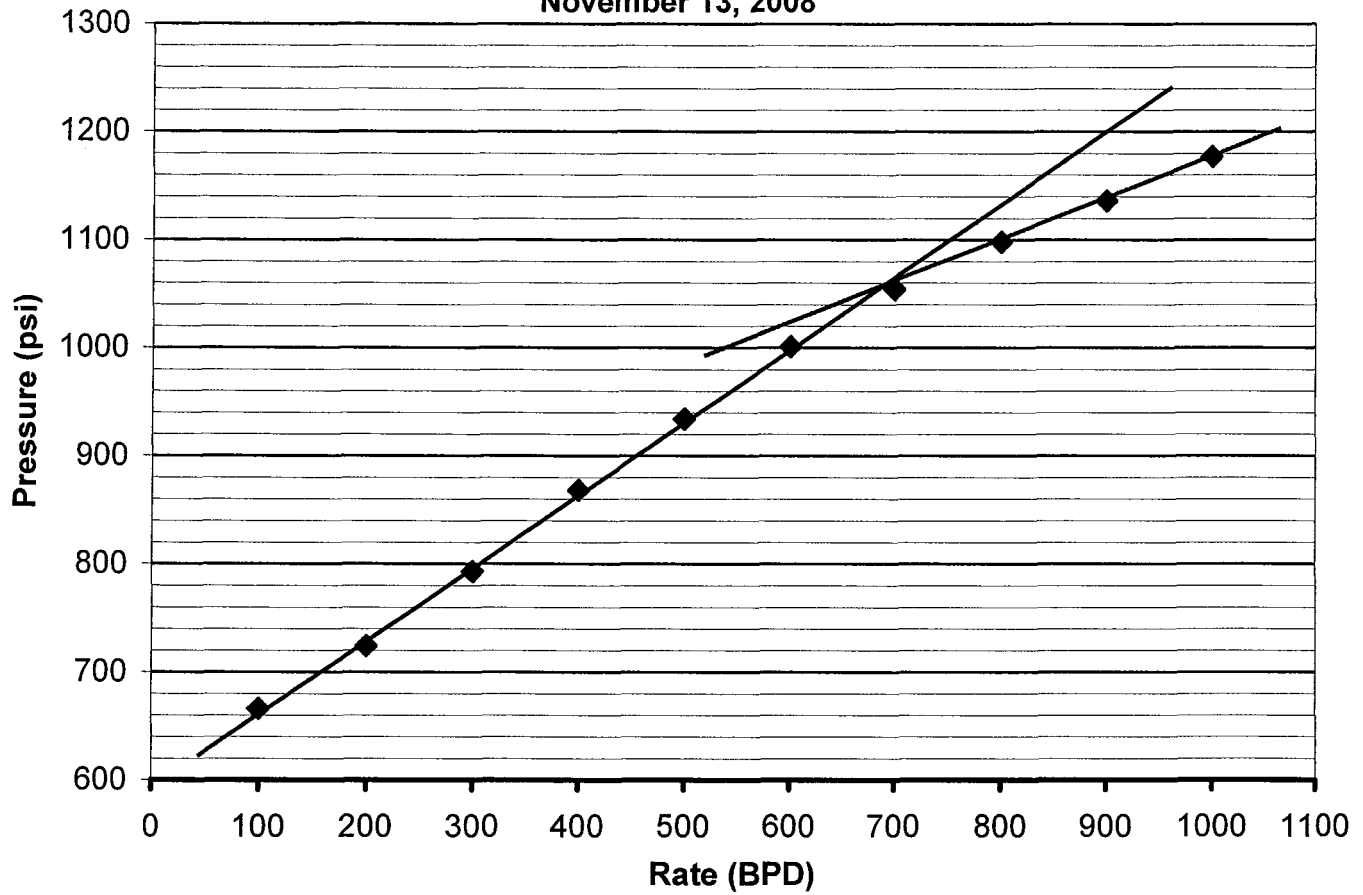
**RECEIVED**

**NOV 18 2008**

**DIV. OF OIL, GAS & MINING**



Federal 5-11-9-17  
Sundance Unit  
Step Rate Test  
November 13, 2008



Start Pressure: 637 psi  
Instantaneous Shut In Pressure (ISIP): 1133 psi  
Top Perforation: 4001 feet  
Fracture pressure (Pfp): 1060 psi  
FG: 0.704 psi/ft

Step	Rate(bpd)	Pressure(psi)
1	100	666
2	200	724
3	300	793
4	400	868
5	500	934
6	600	1001
7	700	1054
8	800	1098
9	900	1136
10	1000	1177



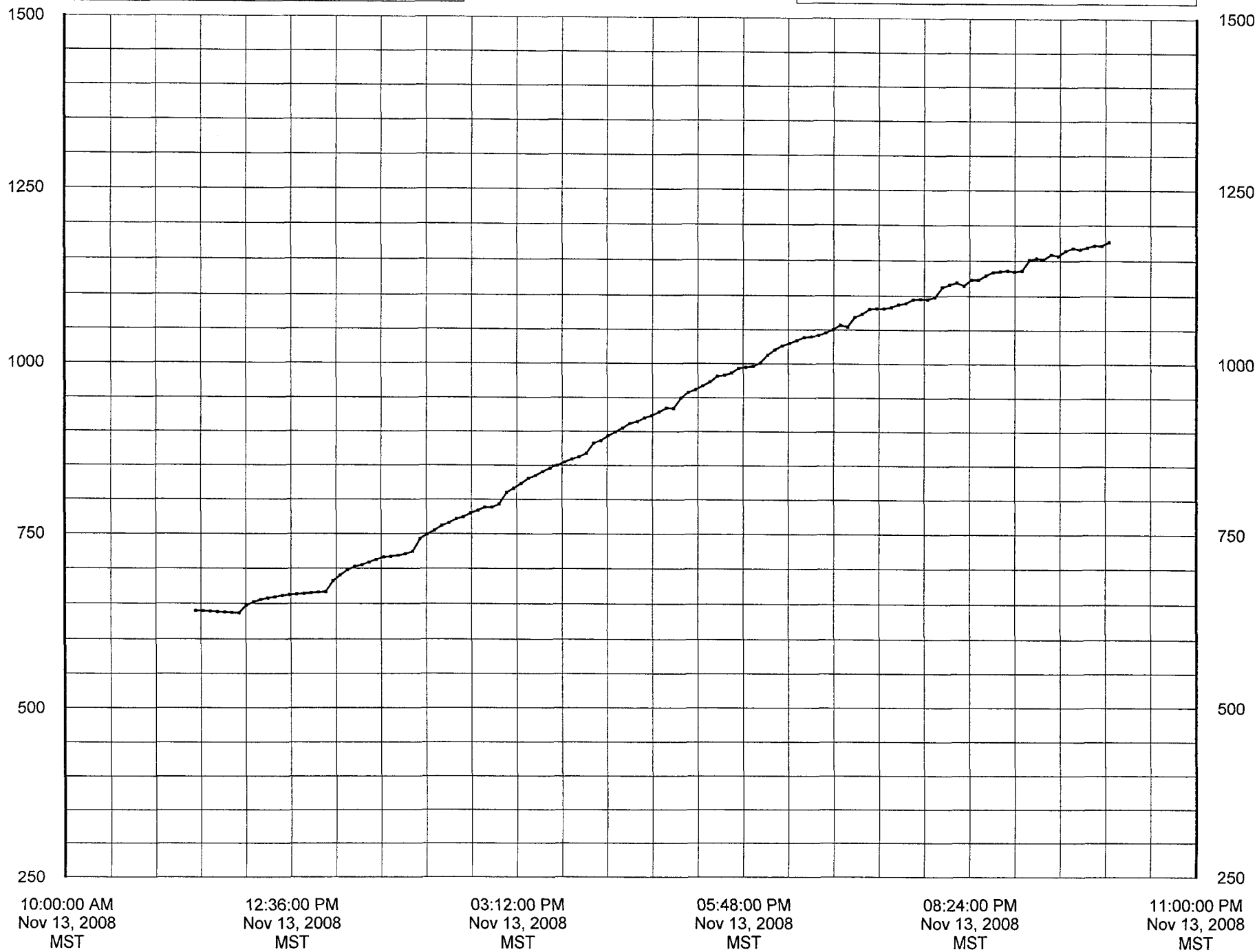
PSIA

Absolute Pressure

Federal 5-11-9-17 SRT (11-13-08)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA





Report Name: PrTemp1000 Data Table  
 Report Date: Nov 14, 2008 07:54:13 AM MST  
 File Name: C:\Program Files\PTC\Instruments 2.00\Federal 5-11-9-17 SRT (11-13-08).csv  
 Title: Federal 5-11-9-17 SRT (11-13-08)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Nov 13, 2008 11:29:59 AM MST  
 Data End Date: Nov 13, 2008 10:00:00 PM MST  
 Reading Rate: 1 Minute  
 Readings: 1 to 127 of 127  
 Last Calibration Date: May 21, 2008  
 Next Calibration Date: May 21, 2009

<u>Reading</u>	<u>Date and Time (MST)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Nov 13, 2008 11:29:59 AM	639.800	PSIA
2	Nov 13, 2008 11:34:59 AM	639.400	PSIA
3	Nov 13, 2008 11:39:59 AM	638.800	PSIA
4	Nov 13, 2008 11:45:00 AM	638.200	PSIA
5	Nov 13, 2008 11:50:00 AM	637.800	PSIA
6	Nov 13, 2008 11:54:59 AM	637.000	PSIA
7	Nov 13, 2008 12:00:00 PM	636.600	PSIA
8	Nov 13, 2008 12:04:59 PM	647.600	PSIA
9	Nov 13, 2008 12:10:00 PM	652.000	PSIA
10	Nov 13, 2008 12:14:59 PM	655.400	PSIA
11	Nov 13, 2008 12:19:59 PM	657.600	PSIA
12	Nov 13, 2008 12:25:00 PM	659.200	PSIA
13	Nov 13, 2008 12:29:59 PM	661.400	PSIA
14	Nov 13, 2008 12:35:00 PM	662.400	PSIA
15	Nov 13, 2008 12:40:00 PM	663.200	PSIA
16	Nov 13, 2008 12:45:00 PM	664.000	PSIA
17	Nov 13, 2008 12:49:59 PM	665.200	PSIA
18	Nov 13, 2008 12:55:00 PM	666.000	PSIA
19	Nov 13, 2008 12:59:59 PM	666.400	PSIA
20	Nov 13, 2008 01:04:59 PM	682.000	PSIA
21	Nov 13, 2008 01:09:59 PM	690.000	PSIA
22	Nov 13, 2008 01:14:59 PM	698.000	PSIA
23	Nov 13, 2008 01:20:00 PM	702.800	PSIA
24	Nov 13, 2008 01:25:00 PM	705.200	PSIA
25	Nov 13, 2008 01:30:00 PM	709.000	PSIA
26	Nov 13, 2008 01:34:59 PM	712.800	PSIA
27	Nov 13, 2008 01:40:00 PM	716.200	PSIA
28	Nov 13, 2008 01:44:59 PM	717.200	PSIA
29	Nov 13, 2008 01:49:59 PM	718.600	PSIA
30	Nov 13, 2008 01:54:59 PM	721.000	PSIA
31	Nov 13, 2008 01:59:59 PM	724.400	PSIA
32	Nov 13, 2008 02:05:00 PM	742.200	PSIA
33	Nov 13, 2008 02:09:59 PM	749.200	PSIA
34	Nov 13, 2008 02:15:00 PM	754.600	PSIA
35	Nov 13, 2008 02:20:00 PM	761.800	PSIA
36	Nov 13, 2008 02:25:00 PM	765.800	PSIA
37	Nov 13, 2008 02:29:59 PM	771.400	PSIA
38	Nov 13, 2008 02:34:59 PM	774.200	PSIA
39	Nov 13, 2008 02:39:59 PM	779.600	PSIA
40	Nov 13, 2008 02:45:00 PM	783.800	PSIA
41	Nov 13, 2008 02:50:01 PM	788.200	PSIA
42	Nov 13, 2008 02:54:59 PM	788.200	PSIA
43	Nov 13, 2008 03:00:00 PM	793.000	PSIA
44	Nov 13, 2008 03:04:59 PM	810.000	PSIA
45	Nov 13, 2008 03:10:00 PM	816.400	PSIA
46	Nov 13, 2008 03:15:00 PM	823.400	PSIA
47	Nov 13, 2008 03:20:00 PM	830.600	PSIA
48	Nov 13, 2008 03:24:59 PM	835.000	PSIA
49	Nov 13, 2008 03:29:59 PM	841.000	PSIA
50	Nov 13, 2008 03:35:00 PM	846.000	PSIA
51	Nov 13, 2008 03:40:00 PM	850.200	PSIA
52	Nov 13, 2008 03:45:00 PM	854.800	PSIA
53	Nov 13, 2008 03:49:59 PM	859.200	PSIA
54	Nov 13, 2008 03:55:00 PM	862.600	PSIA
55	Nov 13, 2008 03:59:59 PM	868.000	PSIA
56	Nov 13, 2008 04:04:59 PM	882.800	PSIA
57	Nov 13, 2008 04:09:59 PM	886.600	PSIA
58	Nov 13, 2008 04:14:59 PM	893.800	PSIA
59	Nov 13, 2008 04:20:00 PM	899.200	PSIA
60	Nov 13, 2008 04:25:00 PM	905.400	PSIA



61	Nov 13, 2008 04:30:01 PM	912.200	PSIA
62	Nov 13, 2008 04:35:00 PM	915.000	PSIA
63	Nov 13, 2008 04:40:00 PM	920.200	PSIA
64	Nov 13, 2008 04:44:59 PM	923.600	PSIA
65	Nov 13, 2008 04:49:59 PM	928.800	PSIA
66	Nov 13, 2008 04:55:00 PM	934.400	PSIA
67	Nov 13, 2008 04:59:59 PM	933.800	PSIA
68	Nov 13, 2008 05:05:01 PM	949.400	PSIA
69	Nov 13, 2008 05:09:59 PM	957.400	PSIA
70	Nov 13, 2008 05:15:01 PM	961.800	PSIA
71	Nov 13, 2008 05:20:00 PM	967.400	PSIA
72	Nov 13, 2008 05:25:01 PM	973.000	PSIA
73	Nov 13, 2008 05:29:59 PM	981.400	PSIA
74	Nov 13, 2008 05:35:00 PM	983.000	PSIA
75	Nov 13, 2008 05:39:59 PM	986.200	PSIA
76	Nov 13, 2008 05:45:00 PM	993.200	PSIA
77	Nov 13, 2008 05:50:00 PM	994.800	PSIA
78	Nov 13, 2008 05:54:59 PM	996.000	PSIA
79	Nov 13, 2008 06:00:00 PM	1000.800	PSIA
80	Nov 13, 2008 06:04:59 PM	1012.600	PSIA
81	Nov 13, 2008 06:10:00 PM	1020.600	PSIA
82	Nov 13, 2008 06:14:59 PM	1026.200	PSIA
83	Nov 13, 2008 06:20:00 PM	1030.000	PSIA
84	Nov 13, 2008 06:24:59 PM	1034.200	PSIA
85	Nov 13, 2008 06:29:59 PM	1038.600	PSIA
86	Nov 13, 2008 06:35:00 PM	1040.000	PSIA
87	Nov 13, 2008 06:40:00 PM	1041.800	PSIA
88	Nov 13, 2008 06:45:01 PM	1045.800	PSIA
89	Nov 13, 2008 06:49:59 PM	1050.200	PSIA
90	Nov 13, 2008 06:55:00 PM	1056.400	PSIA
91	Nov 13, 2008 07:00:00 PM	1054.200	PSIA
92	Nov 13, 2008 07:05:00 PM	1068.200	PSIA
93	Nov 13, 2008 07:09:59 PM	1073.400	PSIA
94	Nov 13, 2008 07:15:00 PM	1080.600	PSIA
95	Nov 13, 2008 07:20:01 PM	1081.400	PSIA
96	Nov 13, 2008 07:25:00 PM	1081.400	PSIA
97	Nov 13, 2008 07:30:01 PM	1083.400	PSIA
98	Nov 13, 2008 07:34:59 PM	1087.400	PSIA
99	Nov 13, 2008 07:40:01 PM	1089.200	PSIA
100	Nov 13, 2008 07:44:59 PM	1094.800	PSIA
101	Nov 13, 2008 07:50:00 PM	1095.400	PSIA
102	Nov 13, 2008 07:54:59 PM	1095.200	PSIA
103	Nov 13, 2008 08:00:00 PM	1098.200	PSIA
104	Nov 13, 2008 08:05:01 PM	1112.600	PSIA
105	Nov 13, 2008 08:09:59 PM	1115.800	PSIA
106	Nov 13, 2008 08:15:01 PM	1119.000	PSIA
107	Nov 13, 2008 08:19:59 PM	1114.600	PSIA
108	Nov 13, 2008 08:25:01 PM	1123.000	PSIA
109	Nov 13, 2008 08:30:00 PM	1122.800	PSIA
110	Nov 13, 2008 08:34:59 PM	1129.000	PSIA
111	Nov 13, 2008 08:40:00 PM	1133.800	PSIA
112	Nov 13, 2008 08:44:59 PM	1134.800	PSIA
113	Nov 13, 2008 08:50:01 PM	1136.000	PSIA
114	Nov 13, 2008 08:55:00 PM	1134.600	PSIA
115	Nov 13, 2008 09:00:01 PM	1136.000	PSIA
116	Nov 13, 2008 09:05:00 PM	1151.200	PSIA
117	Nov 13, 2008 09:10:00 PM	1153.400	PSIA
118	Nov 13, 2008 09:15:00 PM	1152.000	PSIA
119	Nov 13, 2008 09:19:59 PM	1158.800	PSIA
120	Nov 13, 2008 09:25:00 PM	1156.800	PSIA
121	Nov 13, 2008 09:30:00 PM	1164.200	PSIA
122	Nov 13, 2008 09:35:01 PM	1168.200	PSIA
123	Nov 13, 2008 09:39:59 PM	1166.000	PSIA
124	Nov 13, 2008 09:45:01 PM	1168.800	PSIA
125	Nov 13, 2008 09:50:00 PM	1171.800	PSIA
126	Nov 13, 2008 09:55:01 PM	1171.600	PSIA
127	Nov 13, 2008 10:00:00 PM	1176.800	PSIA



PSIA

Absolute Pressure

Federal 5-11-9-17 ISIP (11-13-08)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA

1200

1150

1100

1050

1000

1200

1150

1100

1050

1000

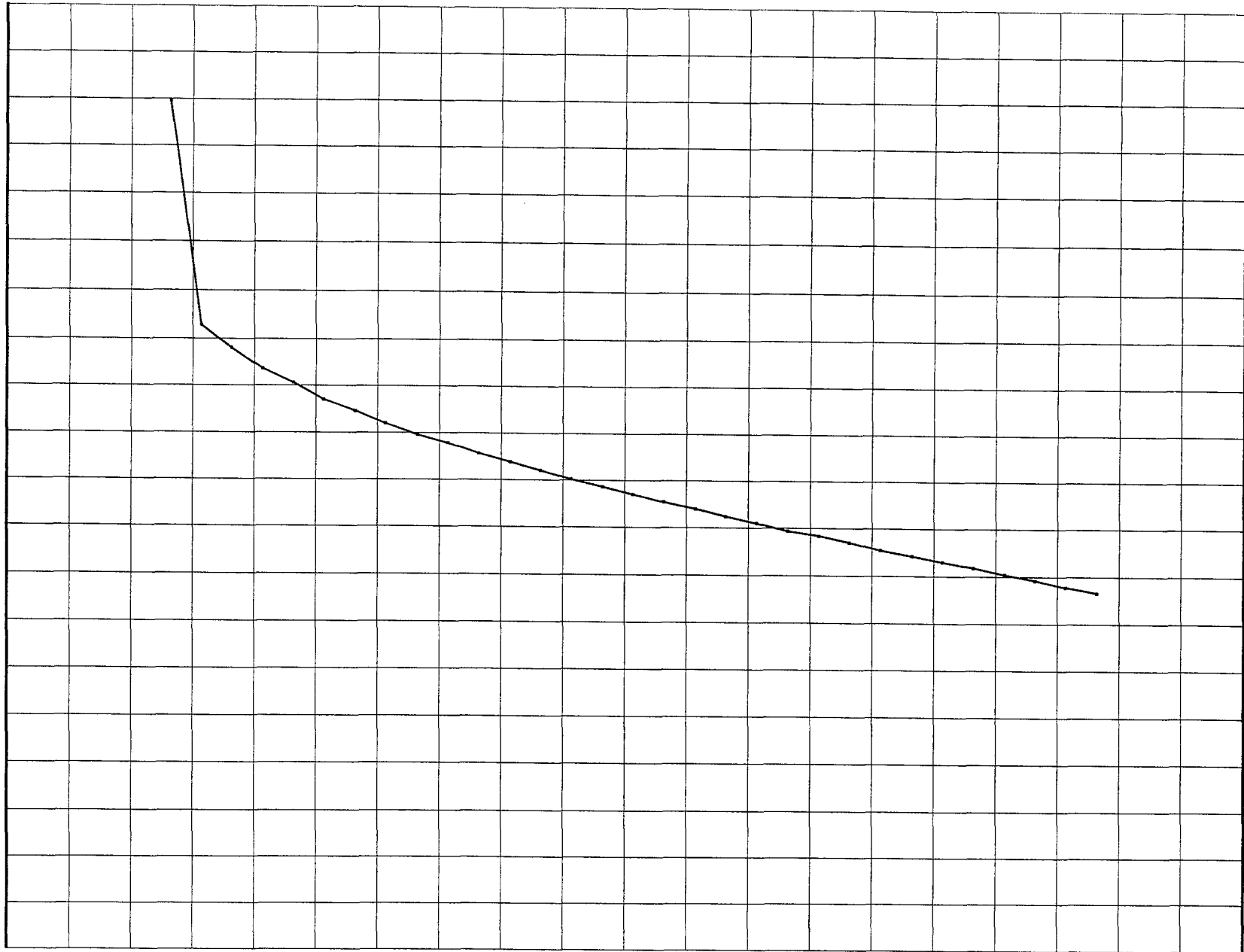
09:55:00 PM  
Nov 13, 2008  
MST

10:05:00 PM  
Nov 13, 2008  
MST

10:15:00 PM  
Nov 13, 2008  
MST

10:25:00 PM  
Nov 13, 2008  
MST

10:35:00 PM  
Nov 13, 2008  
MST





Report Name:	PrTemp1000 Data Table
Report Date:	Nov 14, 2008 07:54:01 AM MST
File Name:	C:\Program Files\PTC® Instruments 2.00\Federal 5-11-9-17 ISIP (11-13-08).csv
Title:	Federal 5-11-9-17 ISIP (11-13-08)
Device:	PrTemp1000 - Temperature and Pressure Recorder
Hardware Revision:	REV2C (64K)
Serial Number:	M75866
Device ID:	PrTemp
Data Start Date:	Nov 13, 2008 10:00:16 PM MST
Data End Date:	Nov 13, 2008 10:30:16 PM MST
Reading Rate:	1 Minute
Readings:	1 to 31 of 31
Last Calibration Date:	May 21, 2008
Next Calibration Date:	May 21, 2009

<u>Reading</u>	<u>Date and Time (MST)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Nov 13, 2008 10:00:16 PM	1179.600	PSIA
2	Nov 13, 2008 10:01:17 PM	1132.800	PSIA
3	Nov 13, 2008 10:02:15 PM	1128.000	PSIA
4	Nov 13, 2008 10:03:16 PM	1123.600	PSIA
5	Nov 13, 2008 10:04:16 PM	1120.600	PSIA
6	Nov 13, 2008 10:05:15 PM	1117.000	PSIA
7	Nov 13, 2008 10:06:16 PM	1114.600	PSIA
8	Nov 13, 2008 10:07:15 PM	1112.000	PSIA
9	Nov 13, 2008 10:08:17 PM	1109.600	PSIA
10	Nov 13, 2008 10:09:16 PM	1107.800	PSIA
11	Nov 13, 2008 10:10:16 PM	1105.600	PSIA
12	Nov 13, 2008 10:11:17 PM	1103.800	PSIA
13	Nov 13, 2008 10:12:16 PM	1102.000	PSIA
14	Nov 13, 2008 10:13:15 PM	1100.200	PSIA
15	Nov 13, 2008 10:14:17 PM	1098.600	PSIA
16	Nov 13, 2008 10:15:16 PM	1097.000	PSIA
17	Nov 13, 2008 10:16:16 PM	1095.400	PSIA
18	Nov 13, 2008 10:17:17 PM	1094.000	PSIA
19	Nov 13, 2008 10:18:16 PM	1092.400	PSIA
20	Nov 13, 2008 10:19:16 PM	1091.000	PSIA
21	Nov 13, 2008 10:20:16 PM	1089.400	PSIA
22	Nov 13, 2008 10:21:16 PM	1088.400	PSIA
23	Nov 13, 2008 10:22:15 PM	1087.000	PSIA
24	Nov 13, 2008 10:23:16 PM	1085.400	PSIA
25	Nov 13, 2008 10:24:17 PM	1084.200	PSIA
26	Nov 13, 2008 10:25:16 PM	1083.000	PSIA
27	Nov 13, 2008 10:26:16 PM	1081.800	PSIA
28	Nov 13, 2008 10:27:17 PM	1080.400	PSIA
29	Nov 13, 2008 10:28:16 PM	1079.200	PSIA
30	Nov 13, 2008 10:29:15 PM	1077.800	PSIA
31	Nov 13, 2008 10:30:16 PM	1076.600	PSIA



# Federal 5-11-9-17 Rate Sheet (11-13-08)

<i>Step # 1</i>	Time:	12:05	12:10	12:15	12:20	12:25	12:30
	Rate:	100.4	100.4	100.4	100.3	100.2	100.2
	Time:	12:35	12:40	12:45	12:50	12:55	1:00
	Rate:	100.2	100.1	100.1	100	100	100
<i>Step # 2</i>	Time:	1:05	1:10	1:15	1:20	1:25	1:30
	Rate:	200.3	200.3	200.3	200.3	200.4	200.2
	Time:	1:35	1:40	1:45	1:50	1:55	2:00
	Rate:	200.2	200.3	200.2	200.1	200.1	200.1
<i>Step # 3</i>	Time:	2:05	2:10	2:15	2:20	2:25	2:30
	Rate:	300.6	300.5	300.5	300.6	300.5	300.5
	Time:	2:35	2:40	2:45	2:50	2:55	3:00
	Rate:	300.4	300.4	300.4	300.4	300.3	300.3
<i>Step # 4</i>	Time:	3:05	3:10	3:15	3:20	3:25	3:30
	Rate:	400.5	400.5	400.5	400.5	400.4	400.4
	Time:	3:35	3:40	3:45	3:50	3:55	4:00
	Rate:	400.4	400.3	400.3	400.3	400.3	400.2
<i>Step # 5</i>	Time:	4:05	4:10	4:15	4:20	4:25	4:30
	Rate:	500.4	500.5	500.4	500.4	500.4	500.4
	Time:	4:35	4:40	4:45	4:50	4:55	5:00
	Rate:	500.3	500.3	500.2	500.2	500.2	500.2
<i>Step # 6</i>	Time:	5:05	5:10	5:15	5:20	5:25	5:30
	Rate:	600.5	600.4	600.4	600.4	600.4	600.3
	Time:	5:35	5:40	5:45	5:50	5:55	6:00
	Rate:	600.2	600.2	600.2	600.1	600.1	600
<i>Step # 7</i>	Time:	6:05	6:10	6:15	6:20	6:25	6:30
	Rate:	700.6	700.6	700.6	700.6	700.4	700.4
	Time:	6:35	6:40	6:45	6:50	6:55	7:00
	Rate:	700.3	700.3	700.3	700.3	700.3	700.3
<i>Step # 8</i>	Time:	7:05	7:10	7:15	7:20	7:25	7:30
	Rate:	800.4	800.4	800.4	800.3	800.3	800.2
	Time:	7:35	7:40	7:45	7:50	7:55	8:00
	Rate:	800.2	800.2	800.2	800	800	800



*Step # 9*

Time:	8:05	8:10	8:15	8:20	8:25	8:30
Rate:	16:48	900.7	900.6	900.6	900.5	900.4

Time:	8:35	8:40	8:45	8:50	8:55	9:00
Rate:	900.3	900.3	900.3	900.2	900.2	900.2

*Step # 10*

Time:	9:05	9:10	9:15	9:20	9:25	9:30
Rate:	1000.5	1000.4	1000.4	1000.4	1000.4	1000.3

Time:	9:35	9:40	9:45	9:50	9:55	10:00
Rate:	1000.3	1000.3	1000.2	1000.0	1000.0	1000.0



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-79013
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		7. UNIT or CA AGREEMENT NAME: GMBU
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 2000 FNL 656 FWL		8. WELL NAME and NUMBER: FEDERAL 5-11-9-17
OTR/OTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW, 11, T9S, R17E		9. API NUMBER: 4301332486
		10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT
		COUNTY: DUCHESNE
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON	
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 01/18/2011	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test	
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION		

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on January 18, 2011. Results from the test indicate that the fracture gradient is 0.758 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 1030 psi to 1270 psi.

EPA: UT21054-07128 API: 43-013-32486

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant  
SIGNATURE  DATE 01/20/2011

(This space for State use only)

RECEIVED

JAN 25 2011

DIV. OF OIL, GAS & MINING



## Step Rate Test (SRT) Analysis

Date: 01/20/2011

Operator:

Newfield Production Company

Well:

Federal 5-11-9-17

Permit #:

UT21054-07128

**Enter the following data :**

Specific Gravity (sg) of injectate = 1.015 g/cc  
Depth to top perforation (D) = 4001 feet 4001  
Top of permitted injection zone depth (blank=use top perforation to calculate fg) =            feet  
Estimated Formation Parting Pressure (P<sub>fp</sub>) from SRT chart = 1275 psi  
Instantaneous Shut In Pressure (ISIP) from SRT = 1347 psi 1275  
Bottom Hole Parting Pressure (P<sub>bhp</sub>) from downhole pressure recorder =            psi no downhole

### Part One - Calculation of Fracture Gradient (fg)

Calculated Fracture Gradient = 0.758 psi/ft.

where:  $fg = P_{bhp} / D$  (Note: this formula uses the downhole recorded bottom hole parting pressure if available) = 1347

D = depth used = 4001

P<sub>bhp</sub> used = 3033

Calculated Bottom Hole Parting Pressure (P<sub>bhp</sub>) = 3033 psi

3033.419

to calculate Bottom Hole Parting Pressure (P<sub>bhp</sub>) = Formation Fracture Pressure (ISIP or P<sub>fp</sub>) + (0.433 \* SG \* D)

(Uses lesser of ISIP or P<sub>fp</sub>) Value used = 1275

### Part Two - Calculation of Maximum Allowable Injection Pressure (MAIP)

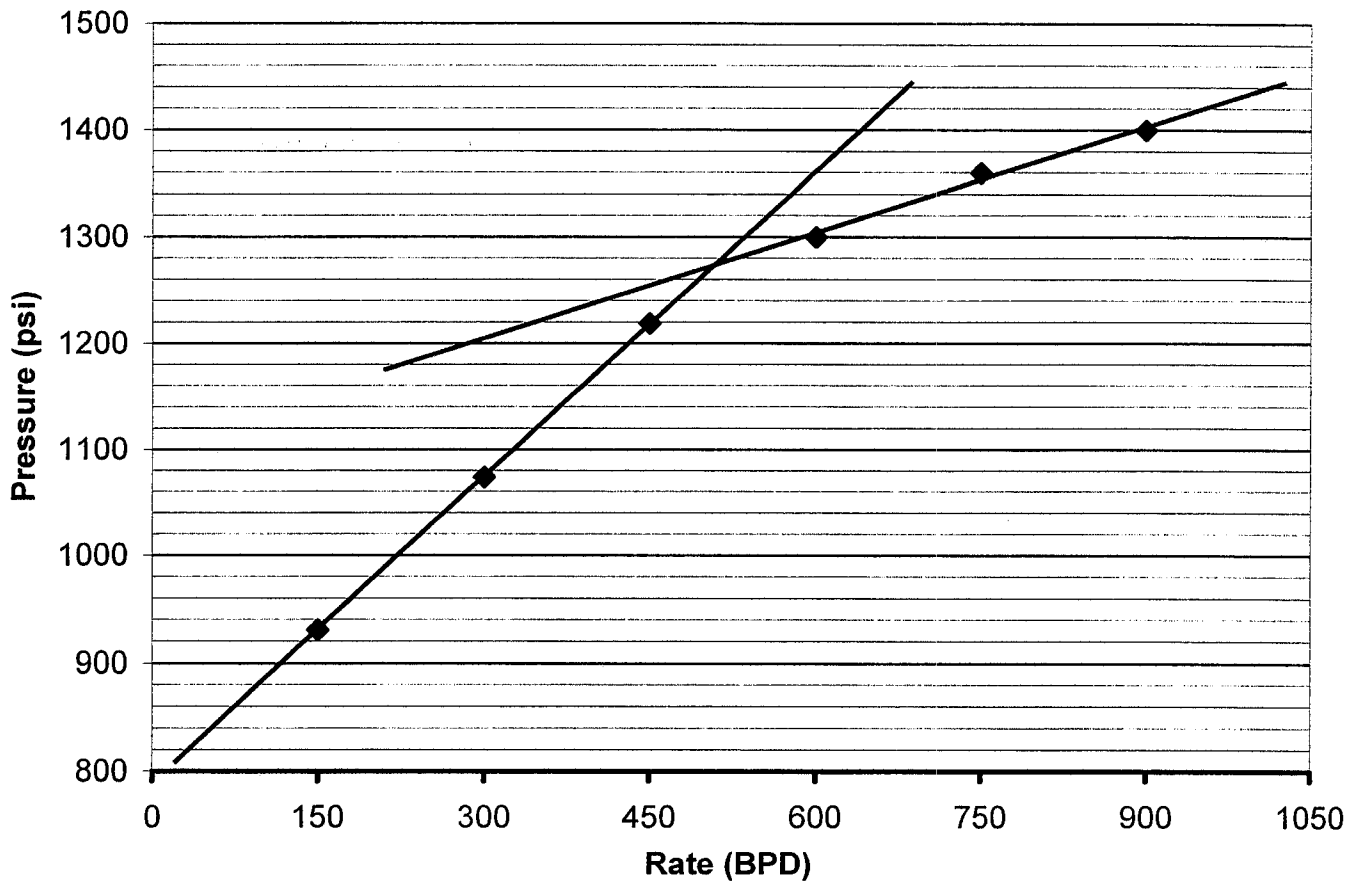
Maximum Allowable Injection Pressure (MAIP) = 1270 psig  
(rounded down to nearest 5 psig)

D = depth used = 4001

MAIP =  $fg \cdot (0.433 \cdot SG) \cdot D = 1274.339$



Federal 5-11-9-17  
Greater Monument Butte Unit  
Step Rate Test  
January 18, 2010

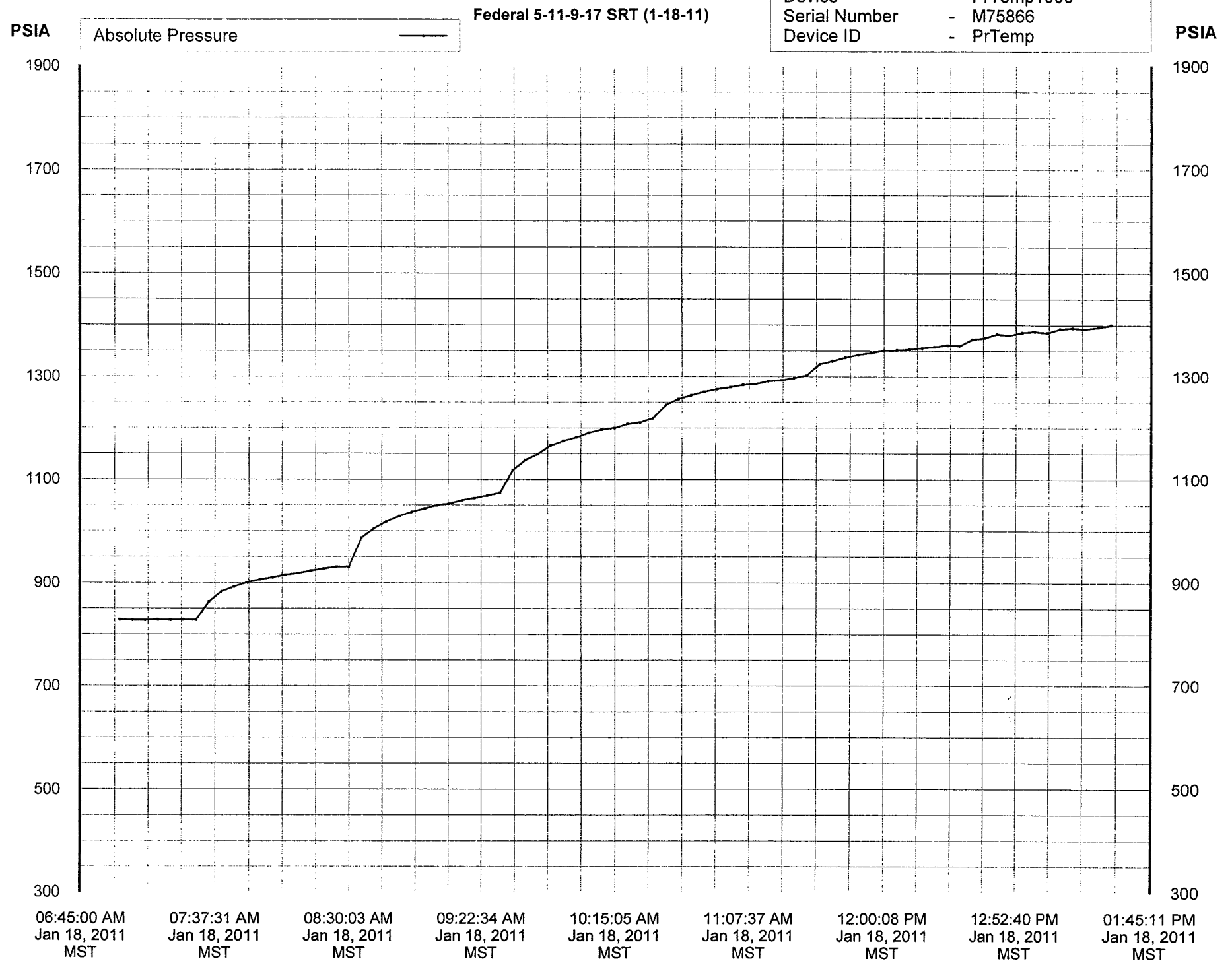


**Start Pressure:** 828 psi  
**Instantaneous Shut In Pressure (ISIP):** 1347 psi  
**Top Perforation:** 4001 feet  
**Fracture pressure (Pfp):** 1275 psi  
**FG:** 0.758 psi/ft

Step	Rate(bpd)	Pressure(psi)
1	150	931
2	300	1074
3	450	1219
4	600	1302
5	750	1360
6	900	1400



Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp





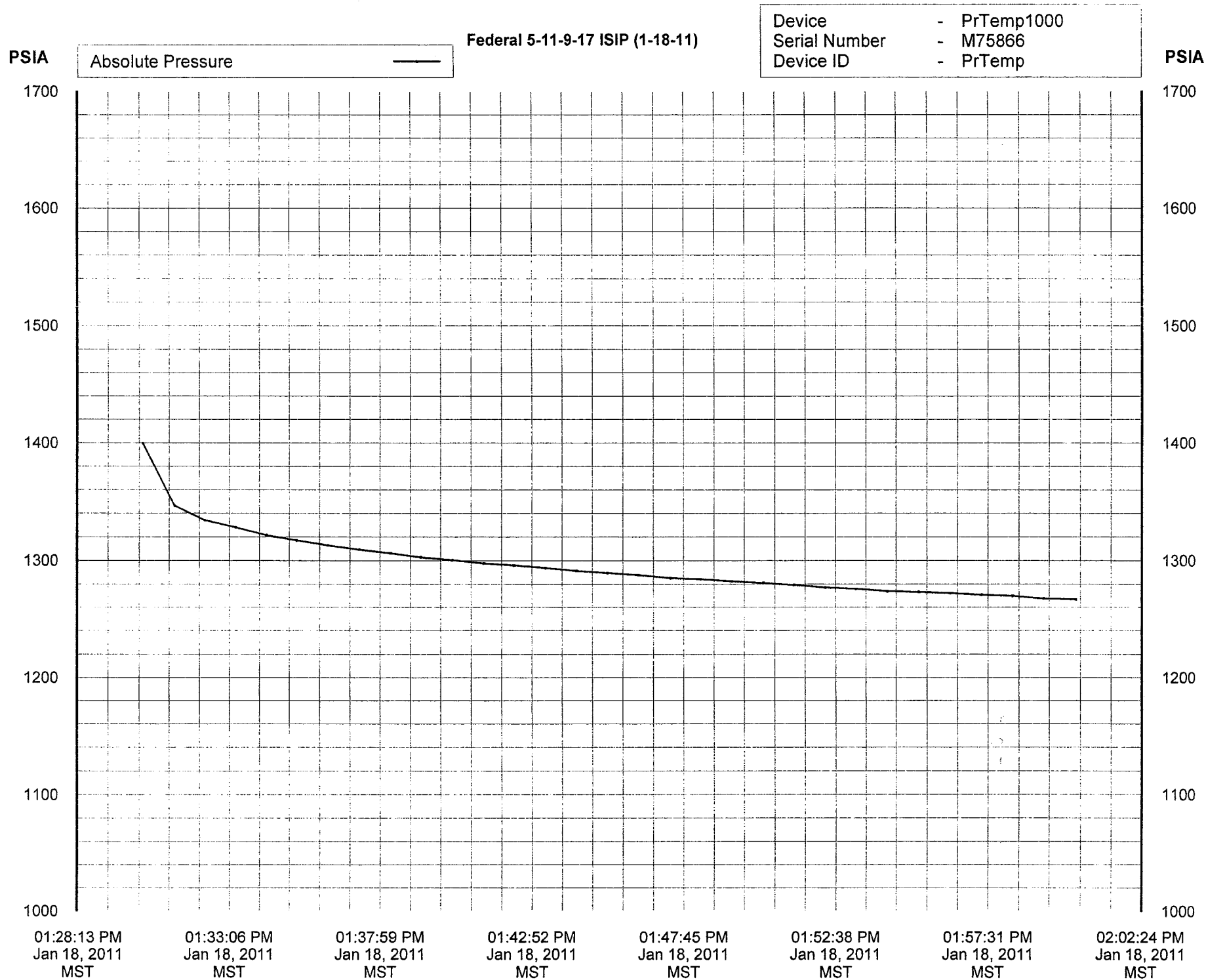
Report Name: PrTemp1000 Data Table  
 Report Date: Jan 20, 2011 08:00:45 AM MST  
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 Title: Federal 5-11-9-17 SRT (1-18-11)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Jan 18, 2011 07:00:06 AM MST  
 Data End Date: Jan 18, 2011 01:30:05 PM MST  
 Reading Rate: 2 Seconds  
 Readings: 1 to 79 of 79  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MST)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Jan 18, 2011 07:00:06 AM	828.200 PSIA	
2	Jan 18, 2011 07:05:05 AM	827.600 PSIA	
3	Jan 18, 2011 07:10:05 AM	827.200 PSIA	
4	Jan 18, 2011 07:15:05 AM	828.200 PSIA	
5	Jan 18, 2011 07:20:06 AM	827.600 PSIA	
6	Jan 18, 2011 07:25:06 AM	828.400 PSIA	
7	Jan 18, 2011 07:30:06 AM	827.600 PSIA	
8	Jan 18, 2011 07:35:06 AM	863.200 PSIA	
9	Jan 18, 2011 07:40:06 AM	883.000 PSIA	
10	Jan 18, 2011 07:45:06 AM	892.400 PSIA	
11	Jan 18, 2011 07:50:05 AM	900.400 PSIA	
12	Jan 18, 2011 07:55:06 AM	906.400 PSIA	
13	Jan 18, 2011 08:00:05 AM	910.400 PSIA	
14	Jan 18, 2011 08:05:09 AM	915.200 PSIA	
15	Jan 18, 2011 08:10:09 AM	918.200 PSIA	
16	Jan 18, 2011 08:15:06 AM	923.000 PSIA	
17	Jan 18, 2011 08:20:05 AM	927.200 PSIA	
18	Jan 18, 2011 08:25:05 AM	930.800 PSIA	
19	Jan 18, 2011 08:30:05 AM	930.800 PSIA	
20	Jan 18, 2011 08:35:04 AM	986.200 PSIA	
21	Jan 18, 2011 08:40:05 AM	1004.400 PSIA	
22	Jan 18, 2011 08:45:04 AM	1017.800 PSIA	
23	Jan 18, 2011 08:50:05 AM	1028.400 PSIA	
24	Jan 18, 2011 08:55:05 AM	1036.400 PSIA	
25	Jan 18, 2011 09:00:05 AM	1043.200 PSIA	
26	Jan 18, 2011 09:05:05 AM	1049.600 PSIA	
27	Jan 18, 2011 09:10:05 AM	1052.800 PSIA	
28	Jan 18, 2011 09:15:05 AM	1059.400 PSIA	
29	Jan 18, 2011 09:20:04 AM	1063.400 PSIA	
30	Jan 18, 2011 09:25:05 AM	1068.600 PSIA	
31	Jan 18, 2011 09:30:04 AM	1073.800 PSIA	
32	Jan 18, 2011 09:35:05 AM	1117.600 PSIA	
33	Jan 18, 2011 09:40:05 AM	1137.200 PSIA	
34	Jan 18, 2011 09:45:05 AM	1148.600 PSIA	
35	Jan 18, 2011 09:50:05 AM	1165.400 PSIA	
36	Jan 18, 2011 09:55:05 AM	1174.600 PSIA	
37	Jan 18, 2011 10:00:05 AM	1181.400 PSIA	
38	Jan 18, 2011 10:05:04 AM	1190.400 PSIA	
39	Jan 18, 2011 10:10:05 AM	1196.200 PSIA	
40	Jan 18, 2011 10:15:04 AM	1199.600 PSIA	
41	Jan 18, 2011 10:20:06 AM	1207.600 PSIA	
42	Jan 18, 2011 10:25:05 AM	1210.800 PSIA	
43	Jan 18, 2011 10:30:06 AM	1218.600 PSIA	
44	Jan 18, 2011 10:35:06 AM	1245.000 PSIA	
45	Jan 18, 2011 10:40:06 AM	1256.200 PSIA	
46	Jan 18, 2011 10:45:06 AM	1263.600 PSIA	
47	Jan 18, 2011 10:50:05 AM	1270.600 PSIA	
48	Jan 18, 2011 10:55:06 AM	1275.800 PSIA	
49	Jan 18, 2011 11:00:14 AM	1279.600 PSIA	
50	Jan 18, 2011 11:05:09 AM	1284.000 PSIA	
51	Jan 18, 2011 11:10:05 AM	1285.600 PSIA	
52	Jan 18, 2011 11:15:05 AM	1291.200 PSIA	
53	Jan 18, 2011 11:20:05 AM	1292.800 PSIA	
54	Jan 18, 2011 11:25:09 AM	1297.400 PSIA	
55	Jan 18, 2011 11:30:06 AM	1302.200 PSIA	
56	Jan 18, 2011 11:35:05 AM	1324.400 PSIA	
57	Jan 18, 2011 11:40:06 AM	1330.200 PSIA	
58	Jan 18, 2011 11:45:08 AM	1337.200 PSIA	
59	Jan 18, 2011 11:50:10 AM	1342.200 PSIA	
60	Jan 18, 2011 11:55:10 AM	1346.400 PSIA	



61	Jan 18, 2011 12:00:09 PM	1350.800	PSIA
62	Jan 18, 2011 12:05:09 PM	1351.400	PSIA
63	Jan 18, 2011 12:10:10 PM	1353.200	PSIA
64	Jan 18, 2011 12:15:14 PM	1355.800	PSIA
65	Jan 18, 2011 12:20:04 PM	1358.000	PSIA
66	Jan 18, 2011 12:25:05 PM	1361.000	PSIA
67	Jan 18, 2011 12:30:04 PM	1360.000	PSIA
68	Jan 18, 2011 12:35:05 PM	1372.000	PSIA
69	Jan 18, 2011 12:40:05 PM	1375.000	PSIA
70	Jan 18, 2011 12:45:05 PM	1382.800	PSIA
71	Jan 18, 2011 12:50:05 PM	1380.400	PSIA
72	Jan 18, 2011 12:55:05 PM	1386.000	PSIA
73	Jan 18, 2011 01:00:05 PM	1387.800	PSIA
74	Jan 18, 2011 01:05:07 PM	1385.200	PSIA
75	Jan 18, 2011 01:10:06 PM	1392.800	PSIA
76	Jan 18, 2011 01:15:04 PM	1394.400	PSIA
77	Jan 18, 2011 01:20:05 PM	1392.800	PSIA
78	Jan 18, 2011 01:25:05 PM	1396.000	PSIA
79	Jan 18, 2011 01:30:05 PM	1400.400	PSIA







Report Name: PrTemp1000 Data Table  
 Report Date: Jan 20, 2011 08:00:35 AM MST  
 File Name: C:\Program Files\PTC® Instruments 2.00\Federal 5-11-9-17 ISIP (1-18-11).csv  
 Title: Federal 5-11-9-17 ISIP (1-18-11)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Jan 18, 2011 01:30:18 PM MST  
 Data End Date: Jan 18, 2011 02:00:19 PM MST  
 Reading Rate: 2 Seconds  
 Readings: 1 to 31 of 31  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MST)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Jan 18, 2011 01:30:18 PM	1399.400	PSIA
2	Jan 18, 2011 01:31:19 PM	1346.600	PSIA
3	Jan 18, 2011 01:32:18 PM	1334.200	PSIA
4	Jan 18, 2011 01:33:18 PM	1328.200	PSIA
5	Jan 18, 2011 01:34:19 PM	1321.400	PSIA
6	Jan 18, 2011 01:35:18 PM	1317.000	PSIA
7	Jan 18, 2011 01:36:18 PM	1312.800	PSIA
8	Jan 18, 2011 01:37:18 PM	1309.200	PSIA
9	Jan 18, 2011 01:38:19 PM	1306.200	PSIA
10	Jan 18, 2011 01:39:18 PM	1302.800	PSIA
11	Jan 18, 2011 01:40:18 PM	1300.400	PSIA
12	Jan 18, 2011 01:41:19 PM	1297.600	PSIA
13	Jan 18, 2011 01:42:18 PM	1296.000	PSIA
14	Jan 18, 2011 01:43:18 PM	1293.800	PSIA
15	Jan 18, 2011 01:44:19 PM	1291.400	PSIA
16	Jan 18, 2011 01:45:18 PM	1289.600	PSIA
17	Jan 18, 2011 01:46:18 PM	1287.800	PSIA
18	Jan 18, 2011 01:47:20 PM	1285.200	PSIA
19	Jan 18, 2011 01:48:18 PM	1284.200	PSIA
20	Jan 18, 2011 01:49:18 PM	1282.400	PSIA
21	Jan 18, 2011 01:50:19 PM	1281.000	PSIA
22	Jan 18, 2011 01:51:18 PM	1279.200	PSIA
23	Jan 18, 2011 01:52:18 PM	1277.000	PSIA
24	Jan 18, 2011 01:53:18 PM	1275.800	PSIA
25	Jan 18, 2011 01:54:19 PM	1273.800	PSIA
26	Jan 18, 2011 01:55:18 PM	1273.200	PSIA
27	Jan 18, 2011 01:56:18 PM	1272.200	PSIA
28	Jan 18, 2011 01:57:19 PM	1270.800	PSIA
29	Jan 18, 2011 01:58:18 PM	1270.000	PSIA
30	Jan 18, 2011 01:59:18 PM	1267.600	PSIA
31	Jan 18, 2011 02:00:19 PM	1266.800	PSIA



# *Federal 5-11-9-17 Rate Sheet (1-18-11)*

<i>Step # 1</i>	Time	7:35	7:40	7:45	7:50	7:55	8:00
	Rate	150.7	150.7	150.7	150.7	150.6	150.6
	Time	8:05	8:10	8:15	8:20	8:25	8:30
	Rate	150.6	150.6	150.5	150.5	150.5	150.5
<i>Step # 2</i>	Time	8:35	8:40	8:45	8:50	8:55	9:00
	Rate	300.6	300.6	300.6	300.6	300.5	300.5
	Time	9:05	9:10	9:15	9:20	9:25	9:30
	Rate	300.4	300.4	300.4	300.3	300.3	300.3
<i>Step # 3</i>	Time	9:35	9:40	9:45	9:50	9:55	10:00
	Rate	450.9	450.9	450.9	450.8	450.8	450.8
	Time	10:05	10:10	10:15	10:20	10:25	10:30
	Rate	450.8	450.7	450.7	450.6	450.6	450.6
<i>Step # 4</i>	Time	10:35	10:40	10:45	10:50	10:55	11:00
	Rate	600.5	600.5	600.5	600.5	600.4	600.4
	Time	11:05	11:10	11:15	11:20	11:25	11:30
	Rate	600.4	600.4	600.3	600.3	600.3	600.3
<i>Step # 5</i>	Time	11:35	11:40	11:45	11:50	11:55	12:00
	Rate	750.7	750.7	750.7	750.6	750.6	750.6
	Time	12:05	12:10	12:15	12:20	12:25	12:30
	Rate	750.5	750.5	750.5	750.4	750.4	750.4
<i>Step # 6</i>	Time	12:35	12:40	12:45	12:50	12:55	1:00
	Rate	900.8	900.8	900.8	900.7	900.7	900.7
	Time	1:05	1:10	1:15	1:20	1:25	1:30
	Rate	900.6	900.6	900.6	900.5	900.5	900.5
	Time						
	Rate						
	Time						
	Rate						
	Time						
	Rate						
	Time						
	Rate						



**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  <small>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.</small>		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-79013
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		7. UNIT or CA AGREEMENT NAME: GMBU
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		8. WELL NAME and NUMBER: FEDERAL 5-11-9-17
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		9. API NUMBER: 4301332486
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 2000 FNL 656 FWL		10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWNW, 11, T9S, R17E		COUNTY: DUCHESNE  STATE: UT

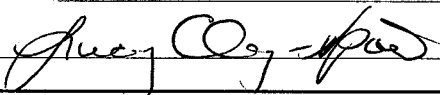
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/STOP) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARITLY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLAIR <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input checked="" type="checkbox"/> OTHER: - Step Rate Test
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 05/24/2011			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on May 24, 2011. Results from the test indicate that the fracture gradient is 0.806 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 1270 psi to 1465 psi.

EPA: UT21054-07128

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
  
**FOR RECORD ONLY**

NAME (PLEASE PRINT) <u>Lucy Chavez-Naupoto</u>	TITLE <u>Water Services Technician</u>
SIGNATURE 	DATE <u>06/08/2011</u>

(This space for State use only)

**RECEIVED**  
**JUN 14 2011**  
DIV. OF OIL, GAS & MINING



## Step Rate Test (SRT) Analysis

Date: 05/26/2011

Operator:

Newfield Production Company

Well:

Federal 5-11-9-17

Permit #:

UT21054-07128

**Enter the following data :**

Specific Gravity (sg) of injectate =	<u>1.015</u>	g/cc	
Depth to top perforation (D) =	<u>4001</u>	feet	4001
Top of permitted injection zone depth (blank=use top perforation to calculate sg) =		feet	
Estimated Formation Parting Pressure (Pfp) from SRT chart =	<u>1500</u>	psi	
Instantaneous Shut In Pressure (ISIP) from SRT =	<u>1465</u>	psi	1500
Bottom Hole Parting Pressure (Pbhp) from downhole pressure recorder =		psi	no downhole

### Part One - Calculation of Fracture Gradient (fg)

**Calculated Fracture Gradient = 0.806 psi/ft.**

where:  $fg = Pbhp / D$  (Note: this formula uses the downhole recorded bottom hole parting pressure if available) = 1465

D = depth used = 4001

Pbhp used = 3223

**Calculated Bottom Hole Parting Pressure (Pbhp) = 3223 psi**

3223.419

to calculate Bottom Hole Parting Pressure (Pbhp) = Formation Fracture Pressure (ISIP or Pfp) + ( 0.433 \* SG \* D )

( Uses lesser of ISIP or Pfp ) Value used = 1465

### Part Two - Calculation of Maximum Allowable Injection Pressure (MAIP)

**Maximum Allowable Injection Pressure (MAIP) = 1465 psig**

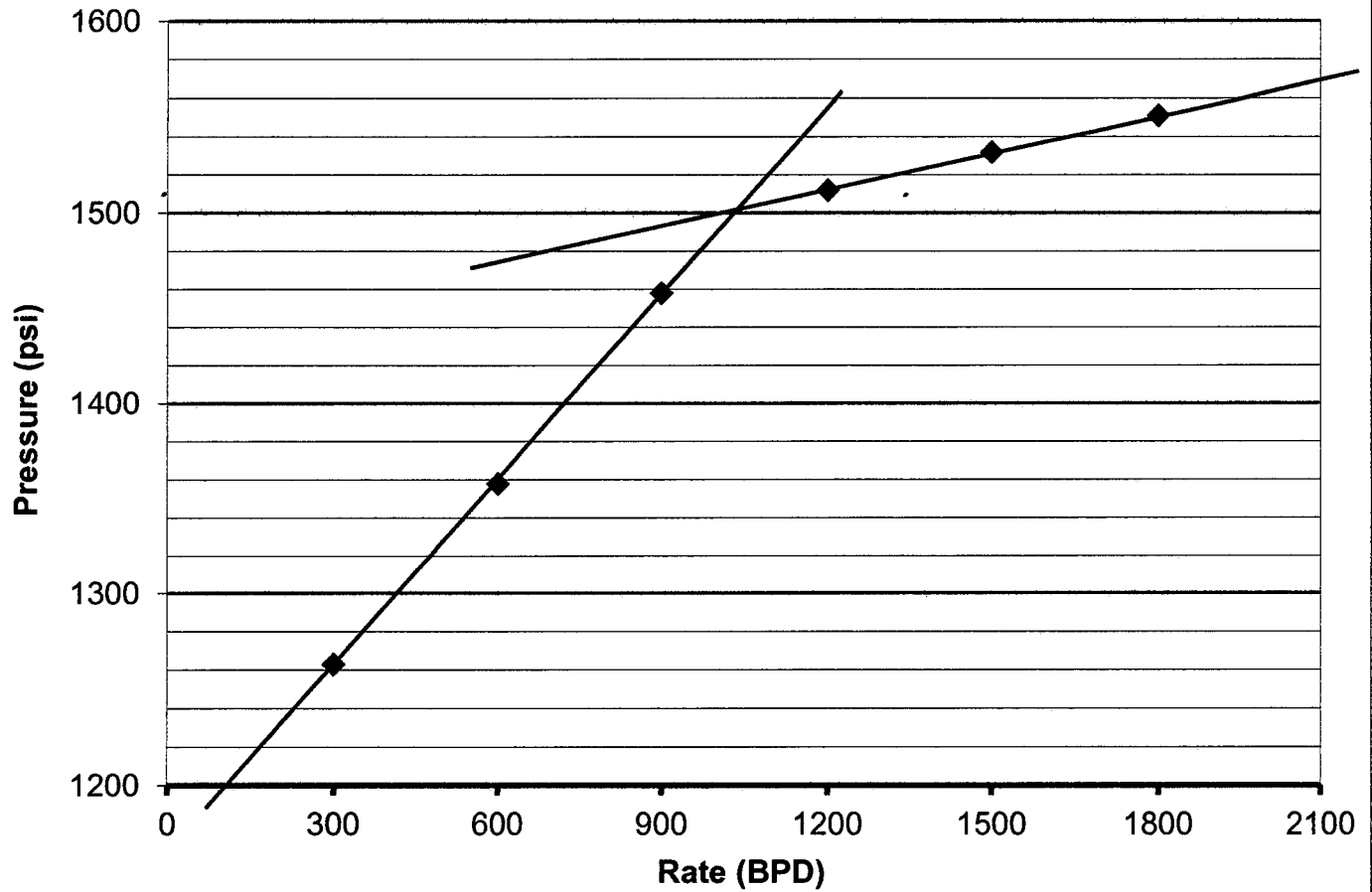
D = depth used = 4001

MAIP =  $[fg \cdot (0.433 \cdot SG)] \cdot D = 1466.387$

(rounded down to nearest 5 psig)



**Federal 5-11-9-17  
Greater Monument Butte Unit  
Step Rate Test  
May 24, 2011**



		Step	Rate(bpd)	Pressure(psi)
Start Pressure:	1172 psi	1	300	1263
Instantaneous Shut In Pressure (ISIP):	1465 psi	2	600	1358
Top Perforation:	4001 feet	3	900	1458
Fracture pressure (Pfp):	1500 psi	4	1200	1512
FG:	0.814 psi/ft	5	1500	1532
		6	1800	1551



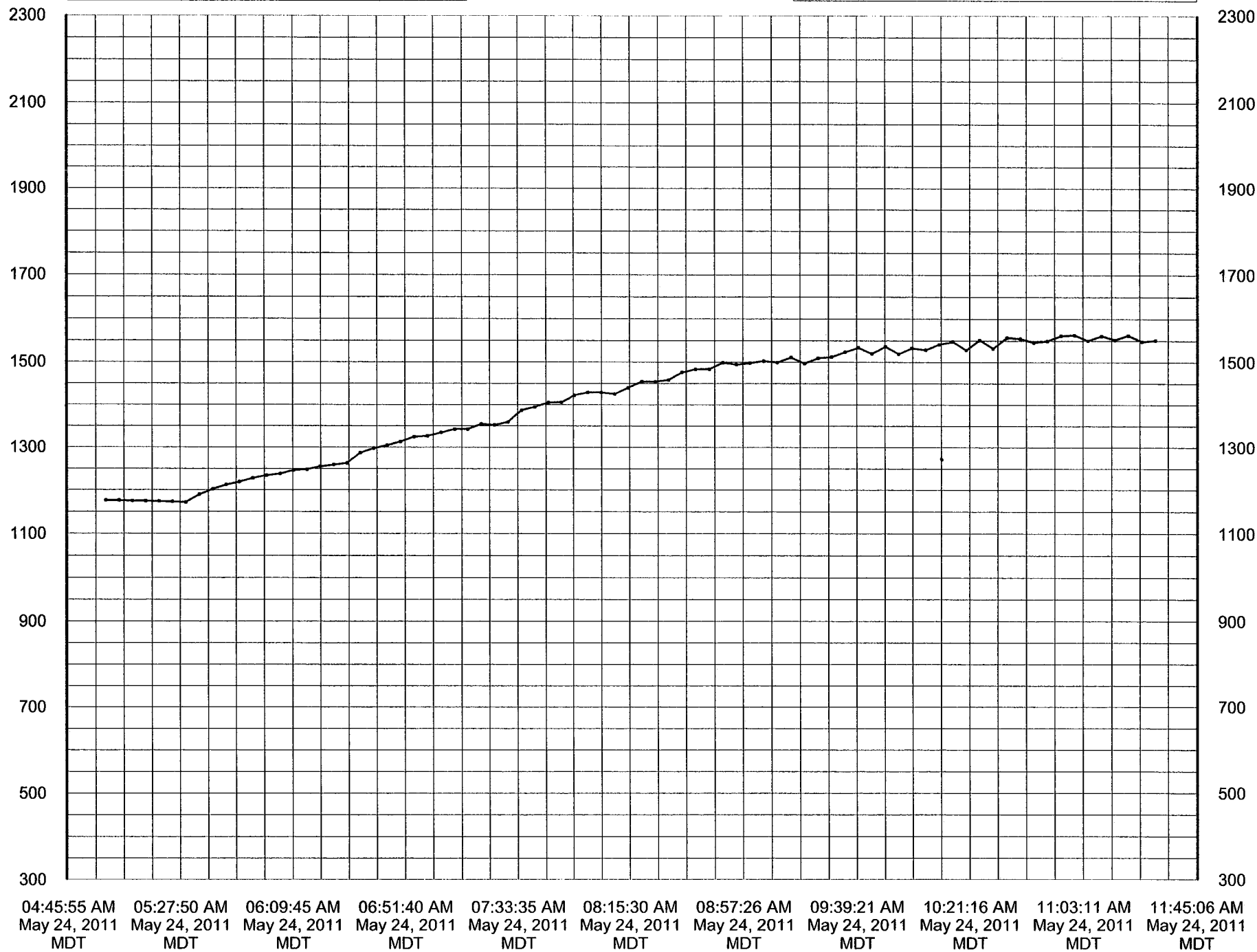
PSIA

Absolute Pressure

Federal 5-11-9-17 SRT (5-24-2011)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA





Report Name:	PrTemp1000 Data Table
Report Date:	May 26, 2011 09:08:55 AM MDT
File Name:	C:\Program Files\PTC® Instruments 2.00\Federal 5-11-9-17 SRT (5-24-2011).csv
Title:	Federal 5-11-9-17 SRT (5-24-2011)
Device:	PrTemp1000 - Temperature and Pressure Recorder
Hardware Revision:	REV2C (64K)
Serial Number:	M75866
Device ID:	PrTemp
Data Start Date:	May 24, 2011 05:00:00 AM MDT
Data End Date:	May 24, 2011 11:30:00 AM MDT
Reading Rate:	2 Seconds
Readings:	1 to 79 of 79
Last Calibration Date:	Apr 12, 2011
Next Calibration Date:	Apr 12, 2012

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	May 24, 2011 05:00:00 AM	1176.200	PSIA
2	May 24, 2011 05:04:59 AM	1176.000	PSIA
3	May 24, 2011 05:10:00 AM	1174.800	PSIA
4	May 24, 2011 05:14:59 AM	1174.600	PSIA
5	May 24, 2011 05:20:00 AM	1174.000	PSIA
6	May 24, 2011 05:24:59 AM	1172.800	PSIA
7	May 24, 2011 05:30:00 AM	1171.600	PSIA
8	May 24, 2011 05:34:59 AM	1189.600	PSIA
9	May 24, 2011 05:40:00 AM	1202.200	PSIA
10	May 24, 2011 05:45:00 AM	1212.200	PSIA
11	May 24, 2011 05:49:59 AM	1218.800	PSIA
12	May 24, 2011 05:55:00 AM	1227.600	PSIA
13	May 24, 2011 05:59:59 AM	1234.000	PSIA
14	May 24, 2011 06:05:00 AM	1238.000	PSIA
15	May 24, 2011 06:09:59 AM	1246.400	PSIA
16	May 24, 2011 06:15:00 AM	1248.200	PSIA
17	May 24, 2011 06:19:59 AM	1255.200	PSIA
18	May 24, 2011 06:25:00 AM	1259.200	PSIA
19	May 24, 2011 06:30:00 AM	1263.000	PSIA
20	May 24, 2011 06:34:59 AM	1286.800	PSIA
21	May 24, 2011 06:39:59 AM	1297.400	PSIA
22	May 24, 2011 06:44:59 AM	1304.200	PSIA
23	May 24, 2011 06:50:00 AM	1313.000	PSIA
24	May 24, 2011 06:54:59 AM	1324.200	PSIA
25	May 24, 2011 07:00:00 AM	1326.000	PSIA
26	May 24, 2011 07:04:59 AM	1334.200	PSIA
27	May 24, 2011 07:09:59 AM	1342.000	PSIA
28	May 24, 2011 07:15:00 AM	1342.200	PSIA
29	May 24, 2011 07:19:59 AM	1354.000	PSIA
30	May 24, 2011 07:25:00 AM	1351.400	PSIA
31	May 24, 2011 07:29:59 AM	1358.400	PSIA
32	May 24, 2011 07:35:00 AM	1386.400	PSIA
33	May 24, 2011 07:39:59 AM	1394.000	PSIA
34	May 24, 2011 07:45:00 AM	1404.600	PSIA
35	May 24, 2011 07:49:59 AM	1405.200	PSIA
36	May 24, 2011 07:55:00 AM	1421.600	PSIA
37	May 24, 2011 08:00:00 AM	1428.600	PSIA
38	May 24, 2011 08:04:59 AM	1428.400	PSIA
39	May 24, 2011 08:10:00 AM	1424.800	PSIA
40	May 24, 2011 08:14:59 AM	1439.400	PSIA
41	May 24, 2011 08:20:00 AM	1454.200	PSIA
42	May 24, 2011 08:24:58 AM	1453.800	PSIA
43	May 24, 2011 08:30:00 AM	1458.000	PSIA
44	May 24, 2011 08:34:58 AM	1476.000	PSIA
45	May 24, 2011 08:39:59 AM	1483.200	PSIA
46	May 24, 2011 08:44:59 AM	1483.200	PSIA
47	May 24, 2011 08:49:59 AM	1498.600	PSIA
48	May 24, 2011 08:55:00 AM	1494.400	PSIA
49	May 24, 2011 08:59:59 AM	1498.000	PSIA
50	May 24, 2011 09:05:00 AM	1502.200	PSIA
51	May 24, 2011 09:09:59 AM	1499.200	PSIA
52	May 24, 2011 09:15:00 AM	1510.800	PSIA
53	May 24, 2011 09:19:59 AM	1496.800	PSIA
54	May 24, 2011 09:25:00 AM	1508.800	PSIA
55	May 24, 2011 09:30:00 AM	1511.800	PSIA
56	May 24, 2011 09:34:59 AM	1523.400	PSIA
57	May 24, 2011 09:40:00 AM	1533.600	PSIA
58	May 24, 2011 09:44:59 AM	1519.400	PSIA
59	May 24, 2011 09:50:00 AM	1536.200	PSIA
60	May 24, 2011 09:54:59 AM	1518.800	PSIA



61	May 24, 2011 09:59:59 AM	1532.600	PSIA
62	May 24, 2011 10:04:59 AM	1528.600	PSIA
63	May 24, 2011 10:10:00 AM	1541.200	PSIA
64	May 24, 2011 10:15:00 AM	1547.600	PSIA
65	May 24, 2011 10:19:58 AM	1528.200	PSIA
66	May 24, 2011 10:25:00 AM	1551.400	PSIA
67	May 24, 2011 10:29:59 AM	1531.800	PSIA
68	May 24, 2011 10:35:00 AM	1556.800	PSIA
69	May 24, 2011 10:39:59 AM	1554.600	PSIA
70	May 24, 2011 10:45:00 AM	1545.600	PSIA
71	May 24, 2011 10:49:59 AM	1549.200	PSIA
72	May 24, 2011 10:55:00 AM	1561.400	PSIA
73	May 24, 2011 11:00:00 AM	1562.600	PSIA
74	May 24, 2011 11:04:59 AM	1550.000	PSIA
75	May 24, 2011 11:10:00 AM	1560.600	PSIA
76	May 24, 2011 11:14:59 AM	1551.800	PSIA
77	May 24, 2011 11:20:00 AM	1561.800	PSIA
78	May 24, 2011 11:24:59 AM	1548.000	PSIA
79	May 24, 2011 11:30:00 AM	1551.200	PSIA



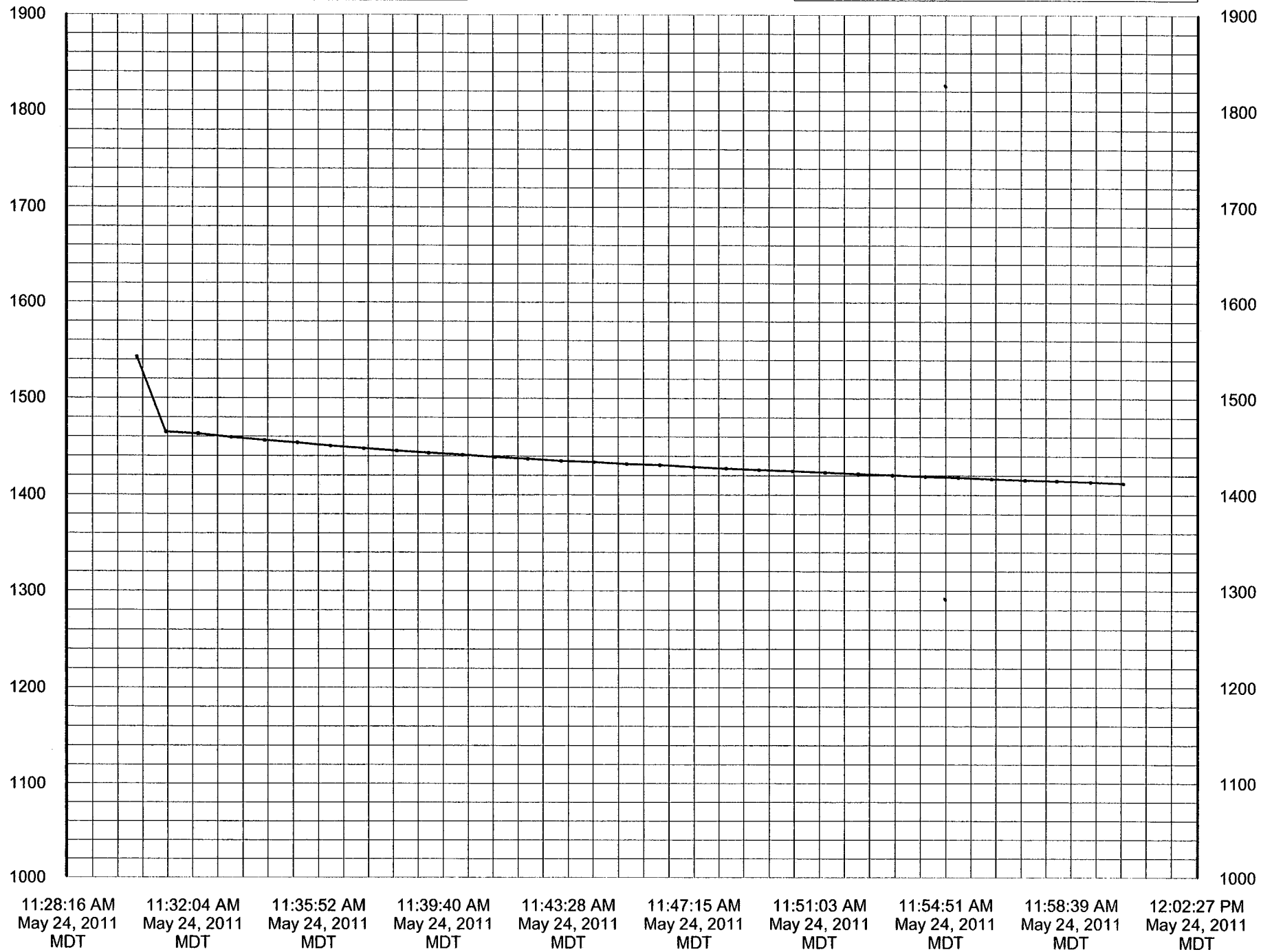
PSIA

Absolute Pressure

Federal 5-11-9-17 ISIP (5-24-2011)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA





Report Name: PrTemp1000 Data Table  
 Report Date: May 26, 2011 09:08:46 AM MDT  
 File Name: C:\Program Files\PTC@ Instruments 2.00\Federal 5-11-9-17 ISIP (5-24-2011).csv  
 Title: Federal 5-11-9-17 ISIP (5-24-2011)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: May 24, 2011 11:30:22 AM MDT  
 Data End Date: May 24, 2011 12:00:15 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 31 of 31  
 Last Calibration Date: Apr 12, 2011  
 Next Calibration Date: Apr 12, 2012

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	May 24, 2011 11:30:22 AM	1542.600	PSIA
2	May 24, 2011 11:31:15 AM	1464.600	PSIA
3	May 24, 2011 11:32:14 AM	1462.800	PSIA
4	May 24, 2011 11:33:14 AM	1459.200	PSIA
5	May 24, 2011 11:34:15 AM	1456.000	PSIA
6	May 24, 2011 11:35:14 AM	1453.600	PSIA
7	May 24, 2011 11:36:14 AM	1450.400	PSIA
8	May 24, 2011 11:37:15 AM	1447.800	PSIA
9	May 24, 2011 11:38:15 AM	1445.400	PSIA
10	May 24, 2011 11:39:14 AM	1443.200	PSIA
11	May 24, 2011 11:40:15 AM	1441.400	PSIA
12	May 24, 2011 11:41:15 AM	1439.000	PSIA
13	May 24, 2011 11:42:14 AM	1437.200	PSIA
14	May 24, 2011 11:43:15 AM	1435.000	PSIA
15	May 24, 2011 11:44:15 AM	1433.800	PSIA
16	May 24, 2011 11:45:14 AM	1431.800	PSIA
17	May 24, 2011 11:46:14 AM	1430.800	PSIA
18	May 24, 2011 11:47:15 AM	1428.800	PSIA
19	May 24, 2011 11:48:14 AM	1427.200	PSIA
20	May 24, 2011 11:49:14 AM	1425.800	PSIA
21	May 24, 2011 11:50:15 AM	1424.600	PSIA
22	May 24, 2011 11:51:14 AM	1423.200	PSIA
23	May 24, 2011 11:52:14 AM	1421.800	PSIA
24	May 24, 2011 11:53:15 AM	1420.400	PSIA
25	May 24, 2011 11:54:15 AM	1419.000	PSIA
26	May 24, 2011 11:55:14 AM	1418.000	PSIA
27	May 24, 2011 11:56:15 AM	1416.600	PSIA
28	May 24, 2011 11:57:15 AM	1415.400	PSIA
29	May 24, 2011 11:58:14 AM	1414.600	PSIA
30	May 24, 2011 11:59:15 AM	1413.400	PSIA
31	May 24, 2011 12:00:15 PM	1412.000	PSIA



# Federal 5-11-9-17 Rate Sheet (5-24-11)

<i>Step # 1</i>	Time:	5:35	5:40	5:45	5:50	5:55	6:00
	Rate:	300.5	300.5	300.5	300.5	300.4	300.4
	Time:	6:05	6:10	6:15	6:20	6:25	6:30
	Rate:	300.4	300.4	300.3	300.3	300.3	300.3
<i>Step # 2</i>	Time:	6:35	6:40	6:45	6:50	6:55	7:00
	Rate:	600.5	600.4	600.4	600.4	600.4	600.4
	Time:	7:05	7:10	7:15	7:20	7:25	7:30
	Rate:	600.3	600.3	600.3	600.2	600.2	600.2
<i>Step # 3</i>	Time:	7:35	7:40	7:45	7:50	7:55	8:00
	Rate:	900.7	900.7	900.7	900.6	900.6	900.6
	Time:	8:05	8:10	8:15	8:20	8:25	8:30
	Rate:	900.6	900.5	900.5	900.5	900.5	900.5
<i>Step # 4</i>	Time:	8:35	8:40	8:45	8:50	8:55	9:00
	Rate:	1200.6	1200.6	1200.5	1200.5	1200.5	1200.4
	Time:	9:05	9:10	9:15	9:20	9:25	9:30
	Rate:	1200.4	1200.4	1200.3	1200.3	1200.3	1200.3
<i>Step # 5</i>	Time:	9:35	9:40	9:45	9:50	9:55	10:00
	Rate:	1500.4	1500.4	1500.4	1500.3	1500.3	1500.2
	Time:	10:05	10:10	10:15	10:20	10:25	10:30
	Rate:	1500.2	1500.2	1500.1	1500.1	1500.1	1500.1
<i>Step # 6</i>	Time:	10:35	10:40	10:45	10:50	10:55	11:00
	Rate:	1800.5	1800.5	1800.5	1800.5	1800.5	1800.3
	Time:	11:05	11:10	11:15	11:20	11:25	11:30
	Rate:	1800.3	1800.3	1800.2	1800.2	1800.2	1800.2



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-79013
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 5-11-9-17
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2000 FNL 0656 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 11 Township: 09.0S Range: 17.0E Meridian: S		<b>9. API NUMBER:</b> 43013324860000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/9/2013	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: 5 YR MIT	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Performed a 5 YR MIT on the above listed well. On 05/09/2013 the casing was pressured up to 1370 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tbg pressure was 975 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-07128		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto		<b>PHONE NUMBER</b> 435 646-4874
<b>SIGNATURE</b> N/A		<b>TITLE</b> Water Services Technician
<b>DATE</b> 5/13/2013		<b>Accepted by the</b> <b>Utah Division of</b> <b>Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> June 04, 2013



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 5 / 9 / 2013  
Test conducted by: BRENDAN CURRY  
Others present: BRETT JENSEN, BART STUBBS, Inaki Lasa. -07128

Well Name: <u>FEDERAL 5-11-9-17</u>	Type: <u>ER SWD</u>	Status: <u>AC TA UC</u>
Field: <u>GREATER MONUMENT BUTTE</u>		
Location: <u>5</u>	Sec: <u>11</u>	T <u>9</u> N <u>18</u> R <u>17</u> E/W County: <u>Duchesne</u> State: <u>UT</u>
Operator: <u>Newfield Production Company</u>		
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: <u>1040</u> PSIG	

Is this a regularly scheduled test? ☒ Yes ☐ No  
Initial test for permit? ☐ Yes ☒ No  
Test after well rework? ☐ Yes ☒ No  
Well injecting during test? ☐ Yes ☒ No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0/975 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>975</u> psig	psig	psig
End of test pressure	<u>975</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1370</u> psig	psig	psig
5 minutes	<u>1370</u> psig	psig	psig
10 minutes	<u>1370</u> psig	psig	psig
15 minutes	<u>1370</u> psig	psig	psig
20 minutes	<u>1370</u> psig	psig	psig
25 minutes	<u>1370</u> psig	psig	psig
30 minutes	<u>1370</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

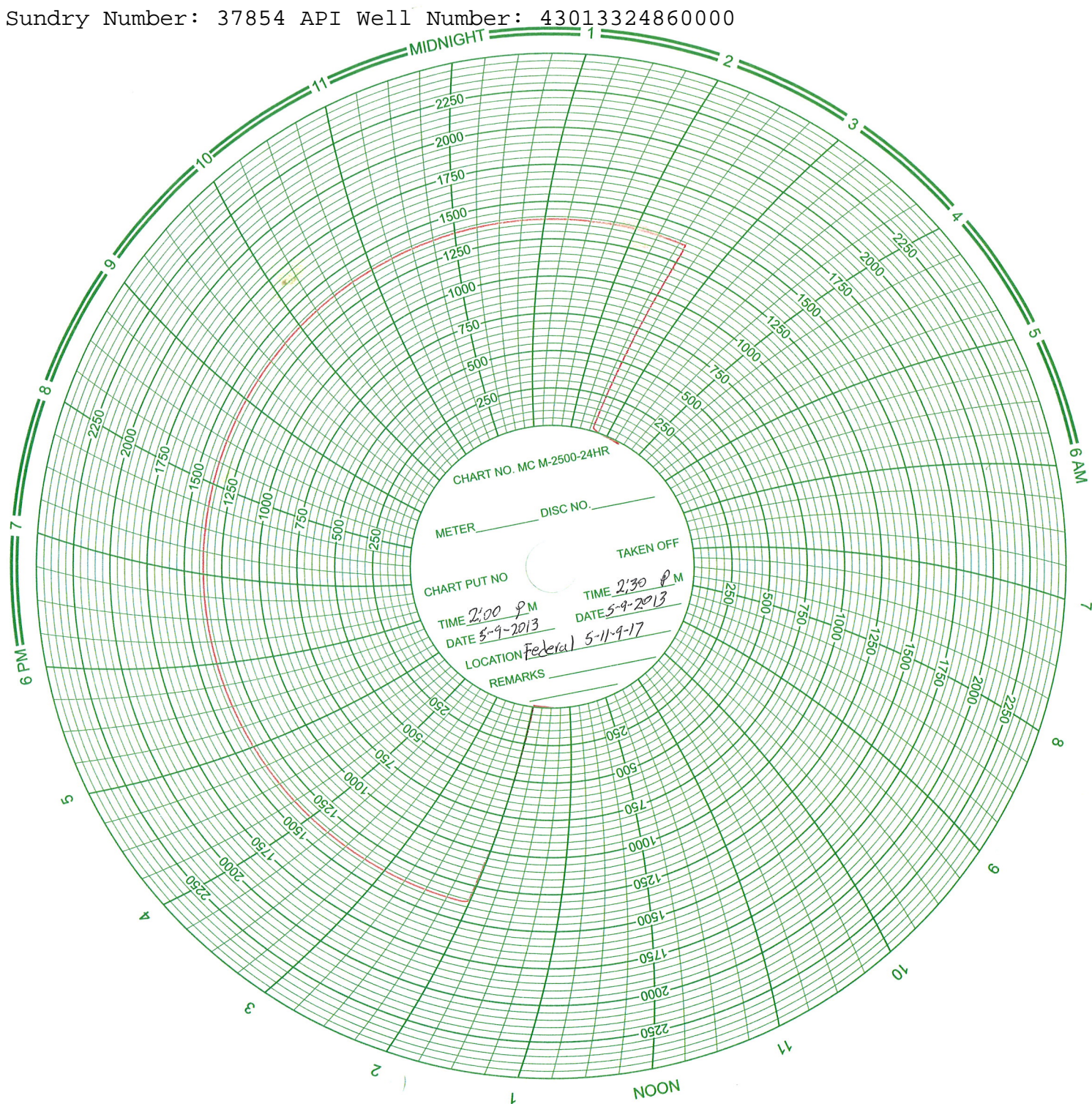
Does the annulus pressure build back up after the test? ☐ Yes ☒ No

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_







NEWFIELD



June 17, 2008

Margo Smith  
Environmental Protection Agency  
Region VII  
1595 Wynkoop Street  
Denver, Colorado 80202-1129

43 013 32486

RE: Injection Conversion  
Federal 5-11-9-17  
Sec.11, T9S, R17E  
EPA # UT 21054-07128

Mr. Jackson:

The subject well was converted from a producing oil well to a water injection well. Please find attached the EPA Form 7520-12, MIT Pressure Test, an updated wellbore diagram, work detail, sundry, and a copy of the chart. The pore pressure for this well has been calculated to be 1083 psia. If you have any questions, please contact me at 435-646-4848.

Sincerely,

*Callie Ross*  
Callie Ross  
Production Clerk



NEWFIELD

June 17, 2008

Mr. Brad Hill  
State of Utah, DOGM  
1594 West North Temple-Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Injection Conversion/MIT  
Federal 5-11-9-17  
Sec.11, T9S, R17E  
API #43-013-32486

Mr. Brad Hill:

The subject well was converted from a producing oil well to a water injection well. An MIT was performed. Please find enclosed the sundry, a copy of the tabular, work detail and chart. If you have any questions, please contact me at 435-646-4848.

Sincerely,



Callie Ross  
Production Clerk



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NUMBER USA UTU-79013
2. NAME OF OPERATOR NEWFIELD PRODUCTION COMPANY		6. IF INDIAN ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		7. UNIT or AGREEMENT NAME SUNDANCE UNIT
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 2000 FNL 656 FWL OTR/OTR SECTION TOWNSHIP RANGE MERIDIAN SWNW, 11, T9S, R17E		8. WELL NAME and NUMBER: FEDERAL 5-11-9-17
		9. API NUMBER: 4301332486
		10. FIELD AND POOL, OR WILDCAT MONUMENT BUTTE
		COUNTY: DUCHESNE
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion 06/06/2008	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Injection Conversion
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 6/9/08 Margo Smith with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 6/11/08. On 6/11/08 the csg was pressured up to 1090 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 0 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21054-07128

API# 43-013-32486

NAME (PLEASE PRINT) Callie Duncan

TITLE Production Clerk

SIGNATURE

*Callie Duncan*

DATE 06/17/2008



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**NEWFIELD PRODUCTION COMPANY**

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2000 FNL 656 FWL

SWNW Section 11 T9S R17E

5. Lease Serial No.

USA UTU-79013

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or  
SUNDANCE UNIT

8. Well Name and No.  
FEDERAL 5-11-9-17

9. API Well No.  
4301332486

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Change Status,
	<input checked="" type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	Injection Conversion

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 6/9/08 Margo Smith with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 6/11/08. On 6/11/08 the csg was pressured up to 1090 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 0 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21054-07128

API# 43-013-32486

I hereby certify that the foregoing is true and  
correct (Printed/ Typed)

Callie Duncan

Signature

*Callie Duncan*

Title

Production Clerk

Date

06/17/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or  
certify that the applicant holds legal or equitable title to those rights in the subject lease  
which would entitle the applicant to conduct operations thereon

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United  
States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_

Date: 6/11/08

Test conducted by: Tietley J. Ruzer

Others present: \_\_\_\_\_

Well Name: <u>Fed 5-11-9-17</u>		Type: <u>ER SWD</u>	Status: <u>AC TA UC</u>
Field: <u>Monument Butte</u>			
Location: <u>SW/1/4</u> Sec: <u>11</u> T <u>9</u> N <u>10</u> R <u>17</u> E W		County: <u>Duchesne</u> State: <u>UT</u>	
Operator: <u>Newfield</u>			
Last MIT: <u>1</u> / <u>1</u>		Maximum Allowable Pressure: _____ PSIG	

Is this a regularly scheduled test? ☐ Yes ☒ No

Initial test for permit? ☒ Yes ☐ No

Test after well rework? ☐ Yes ☒ No

Well injecting during test? ☐ Yes ☒ No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>0</u> psig	psig	psig
End of test pressure	<u>0</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1090</u> psig	psig	psig
5 minutes	<u>1090</u> psig	psig	psig
10 minutes	<u>1090</u> psig	psig	psig
15 minutes	<u>1090</u> psig	psig	psig
20 minutes	<u>1090</u> psig	psig	psig
25 minutes	<u>1090</u> psig	psig	psig
30 minutes	<u>1090</u> psig	psig	psig
_____ minutes	_____ psig	psig	psig
_____ minutes	_____ psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

EPA

## WELL REWORK RECORD

NAME AND ADDRESS OF PERMITTEE

Newfield Production Company  
410 17th Street, Suite 700  
Denver, Colorado 80202-4402

NAME AND ADDRESS OF CONTRACTOR

Same as Permittee

STATE

Utah

COUNTY

Duchesne

PERMIT NUMBER

UTU-79013

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT -- 640 ACRES

SURFACE LOCATION DESCRIPTION

% OF SW % OF NW SECTION 11 TOWNSHIP 9S RANGE 17E

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 2000 ft. from (N/S) N Line of quarter section  
and 656 ft. from (E/W) W Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☒ Enhanced Recovery  
☐ Hydrocarbon Storage

Lease Name

Federal

Total Depth Before Rework

5810'

Total Depth After Rework

5810'

Date Rework Commenced

6/3/2008

Date Rework Completed

6/6/2008

TYPE OF PERMIT

☒ Individual☐ Area

Number of Wells

1

Well Number

5-11-9-17

## WELL CASING RECORD -- BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	
8 5/8"	310'	150	Class G	5360'	5432'	Perf and fraced
5 1/2"	5796'	300	Prem Lite II	4978'	4991'	Perf and fraced
		375	50/50 POZ	4673'	4696'	Perf and fraced
				4001'	4036'	Perf and fraced

## WELL CASING RECORD -- AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS, LIST EACH TYPE

Log Types

Logged Intervals

See attached "Daily Workover Report"

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print)

Callie Ross  
Production Clerk

SIGNATURE

Callie Ross

DATE SIGNED

June 17, 2008



**Daily Activity Report**

Format For Sundry

**FEDERAL 5-11-9-17****3/1/2008 To 9/30/2008****6/4/2008 Day: 1****Conversion**

Basin #2 Swabbing on 6/3/2008 - MIRU Basin rig #2. Unhang head. Unseat rod pump. Flush rods w/ 60 bbls of wtr. Soft seat rod pump & pressure test tbg to 3000 psi. Unseat rod pump. LD rods & pump. ND WH. Release TA. NU BOP. Flush tbg w/ 40 BW. POH w/ tbg, Breaking & doping every connection. 16 jts out. SIWFN.

**6/5/2008 Day: 2****Conversion**

Basin #2 Swabbing on 6/4/2008 - RU hot oiler & flush tbg w/ 20 BW. Continue TOH Tailey, Breaking & doping every connection. PU & RIH w/ 5 1/2" bit & scraper & 168 jts of 2 7/8" J-55 tbg. EOB @ 5482'. SIWFN.

**6/6/2008 Day: 3****Conversion**

Basin #2 Swabbing on 6/5/2008 - RU hot oiler & flush tbg w/ 20 BW. TOH w/ 121 jts of tbg. LD remaining tbg & bit & scraper. PU & RIH w/ 5 1/2" AS1 pkr & 121 jts of 2 7/8" J-55 tbg. RU hot oiler & pump 10 BW down tbg. Drop SV. Fill tbg & pressure test tbg to 3000 psi. Could not get good test (Using collector well wtr). RU sandline. Fish SV. Pump 10 BW of wtr (Wtr from 34 wtr tap). Drop SV. Pressure test to 3000 psi. Good test. RU sandline & fish SV. SIWFN.

**6/7/2008 Day: 4****Conversion**

Basin #2 Swabbing on 6/6/2008 - ND BOP. Land tbg on flange. RU hot oiler & pump 65 bbls of fresh wtr w/ pkr fluid down csg. Unland tbg. Set AS1 pkr w/ CE @ 3945' KB w/ 16,000# of tension. Land tbg on flange. Pressure test annulus to 1500 psi. Good test. RDMOSU. READY FOR MIT!!!!

**6/12/2008 Day: 5****Conversion**

Rigless on 6/11/2008 - On 6/9/08 Margo Smith with the EPA was contacted concerning the initial MIT on the above listed well (Fed 5-11-9-17). Permission was given at that time to perform the test on 6/11/08. On 6/11/08 the csg was pressured up to 1090 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 0 psig during the test. There was not an EPA representative available to witness the test. EPA# UT21054-07128 API# 43-013-32486



# Federal #5-11-9-17

Spud Date: 8/25/04  
Put on Production: 10/04/04  
GL: 5076' KB 5088'

Initial Production: BOPD,  
MCFD, BWPD

## Injection Wellbore Diagram

### SURFACE CASING

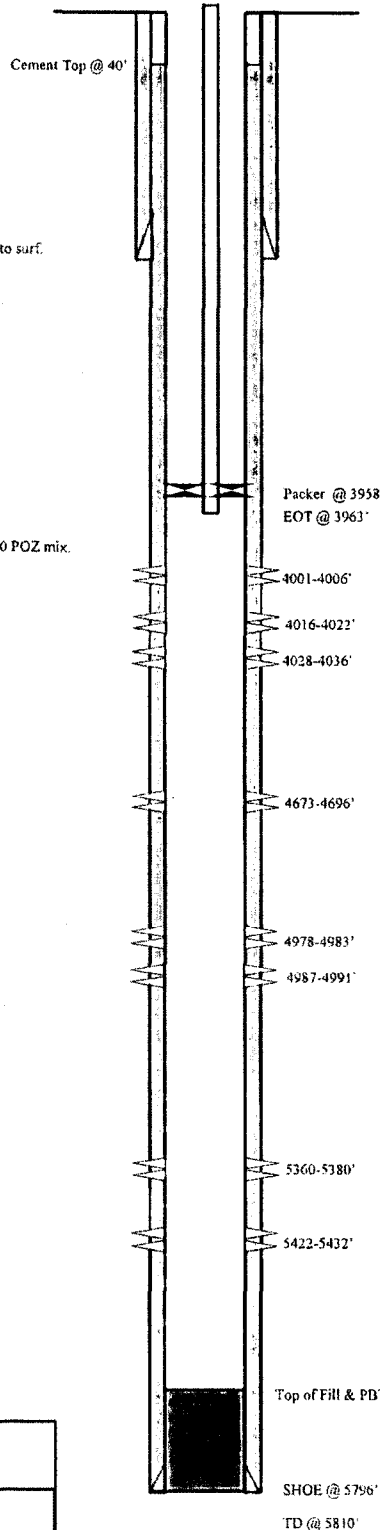
CSG SIZE: 8 5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (301.69')  
DEPTH LANDED: 309.69' KB  
HOLE SIZE: 12 1/4"  
CEMENT DATA: 150sxs Class "G" mixed cmt, est 3 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5 1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 138 jts. (5797.78')  
DEPTH LANDED: 5795.78' KB  
HOLE SIZE: 7 7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 375 sxs 50/50 POZ mix.  
CEMENT TOP AT: 40'

### TUBING

SIZE/GRADE/WT.: 2 7/8" / J-55 / 6.5#  
NO. OF JOINTS: 121 jts. (3942.17')  
SEATING NIPPLE: 2 7/8" (1.10')  
SN LANDED AT: 3954.17' KB  
TOTAL STRING LENGTH: EOT @ 3962.67' w/ 12' KB



### FRAC JOB

9/28/04 5360-5432' Frac CP1 & 2 sands as follows:  
84,815#s 20/40 sand in 636 bbls Lightning  
Frac 17 fluid. Treated @ avg press of 1090 psi  
w/avg rate of 24.8 BPM. ISIP 1425. Calc  
flush 5338 gal. Actual flush: 5368

9/28/04 4978-4991' Frac A1 sands as follows:  
14,525# 20/40 sand in 217 bbls Lightning  
Frac 17 fluid. Treated @ avg press of 1645 psi  
w/avg rate of 24.8 BPM. ISIP 1750 psi. Calc  
flush: 4976 gal. Actual flush: 4977 gal.

9/28/04 4673-4696' Frac C sands as follows:  
79,746# 20/40 sand in 586 bbls Lightning  
Frac 17 fluid. Treated @ avg press of 1735 psi  
w/avg rate of 24.8 BPM. ISIP 2000 psi. Calc  
flush: 4671 gal. Actual flush: 4670 gal.

9/29/04 4001-4036' Frac CB4 sands as follows:  
92,446# 20/40 sand in 645 bbls lightning Frac  
17 fluid. Treated @ avg press of 1695 psi  
w/avg rate of 24.7 BPM. ISIP 1850 psi. Calc  
flush: 3999 gal. Actual flush: 3931 gal.

6/6/08 Well converted to an injection well.  
6/11/08 MIT completed and submitted.

### PERFORATION RECORD

Date	Depth Range	Tool	Holes
9/21/04	5422-5432'	4 JSPF	40 holes
9/21/04	5360-5380'	4 JSPF	80 holes
9/28/04	4987-4991'	4 JSPF	16 holes
9/28/04	4978-4983'	4 JSPF	20 holes
9/28/04	4673-4696'	4 JSPF	92 holes
9/28/04	4028-4036'	4 JSPF	32 holes
9/28/04	4016-4022'	4 JSPF	24 holes
9/28/04	4001-4006'	4 JSPF	20 holes

NEWFIELD

Federal 5-11-9-17  
2000' FNL & 656' FWL  
SW/NW Section 11-T9S-R17E  
Duchesne Co, Utah  
API #43-013-32486; Lease #UTU-79013

CR 6/17/08



# NEWFIELD

## DAILY COMPLETION REPORT

WELL NAME: Federal 5-11-9-17

Report Date: 16-Jun-08

Day: 5

Present Operation: Conversion

Rig: Rigless

### WELL STATUS

Surf Csg: 8 5/8 @ 300' Prod Csg: 5 1/2 Wt: 15.5# @ 5796' Csg PBTD: 5757'  
Tbg: Size: 2 7/8 Wt: 6.5# Grd: J-55 EOT @ 3946.67' BP/Sand PBTD: 5757'

### PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB4 sds	4001-4006'	4/20	A1 sds	4987-4991'	4/16
GB4 sds	4016-4022'	4/24	CP1 sds	5360-5380'	4/80
GB4 sds	4028-4036'	4/32	CP2 sds	5422-5432'	4/40
C sds	4673-4696'	4/92			
A1 sds	4978-4983'	4/20			

### CHRONOLOGICAL OPERATIONS

Date Work Performed: 11-Jun-08

SITP: SICP:

On 6/9/08 Margo Smith with the EPA was contacted concerning the initial MIT on the above listed well (Fed 5-11-9-17). Permission was given at that time to perform the test on 6/11/08. On 6/11/08 the csg was pressured up to 1090 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 0 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT21054-07128

API# 43-013-32486

Starting fluid load to be recovered: Starting oil rec to date:  
Fluid lost/recovered today: Oil lost/recovered today:  
Ending fluid to be recovered: Cum oil recovered:  
IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

### TUBING DETAIL

### COSTS

KB 12.00'

121 jts 2 7/8" J-55 (3942.17')

SN 1.10' @ 3954.17' KB

AS1 pkr CE @ 3958.47' KB

EOT @ 3962.67' KB

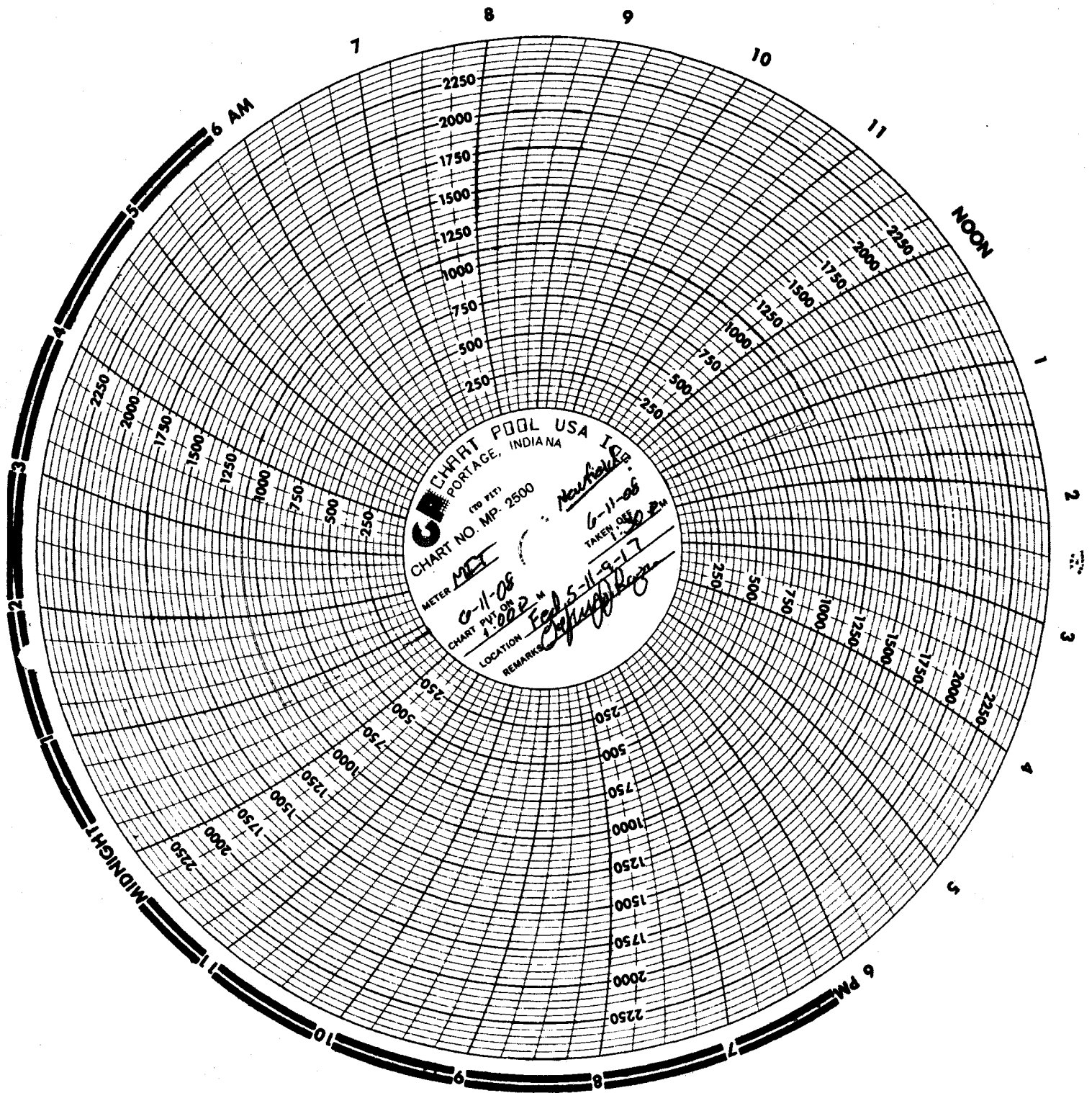
NPC supervision \$300

DAILY COST: \$300

Conversion supervisor: JD Horrocks

TOTAL WELL COST: \$34,721







## NEWFIELD

## Schematic

Well Name: Federal 5-11-9-17

1/3-013-32486

Surface Legal Location 11-9S-17E				API/UWI 43013324860000	Well RC 500151449	Lease	State/Province Utah	Field Name GMBU CTB8	County Duchesne
Spud Date 8/25/2004	Rig Release Date 9/8/2004	On Production Date 10/4/2004	Original KB Elevation (ft) 5,088	Ground Elevation (ft) 5,076	Total Depth All (TVD) (ftKB)		PBTD (All) (ftKB) Original Hole - 5,757.1		

## Most Recent Job

Job Category Testing	Primary Job Type	Secondary Job Type N/A	Job Start Date 5/9/2013	Job End Date 5/9/2013
-------------------------	------------------	---------------------------	----------------------------	--------------------------

TD: 5,810.0

Vertical - Original Hole, 1/11/2016 10:43:52 AM

MD (ftKB)	TVD (ftKB)	Incl (°)	DLS	DLS (°...)	Vertical schematic (actual)
11.8					
12.1					
40.0					
266.4					
308.7					
309.7					1; Surface; 8 5/8 in; 8.097 in; 12-310 ftKB; 297.73 ft
310.0					
3,954.1					2-1; Tubing; 2 7/8; 2.441; 12-3,954; 3,942.20
3,955.4					2-2; Pump Seating Nipple; 2 7/8; 2.441; 3,954-3,955; 1.10
3,962.6					2-3; AS1 Packer; 4 5/8; 2.441; 3,955-3,963; 7.40
4,001.0					
4,005.9					Perforated; 4,001-4,006; 9/28/2004
4,016.1					Perforated; 4,016-4,022; 9/28/2004
4,022.0					
4,027.9					Perforated; 4,028-4,036; 9/28/2004
4,036.1					
4,085.3					
4,092.8					
4,672.9					Perforated; 4,673-4,696; 9/28/2004
4,695.9					
4,978.0					Perforated; 4,978-4,983; 9/28/2004
4,982.9					
4,986.9					Perforated; 4,987-4,991; 9/28/2004
4,991.1					
5,359.9					Perforated; 5,360-5,380; 9/21/2004
5,379.9					
5,421.9					Perforated; 5,422-5,432; 9/21/2004
5,432.1					
5,756.9					
5,757.2					
5,757.5					
5,795.3					
5,795.9					2; Production; 5 1/2 in; 4.950 in; 12-5,796 ftKB; 5,783.80 ft
5,810.0					



# NEWFIELD



## Newfield Wellbore Diagram Data Federal 5-11-9-17

Surface Legal Location 11-9S-17E		API/UWI 43013324860000		Lease	
County Duchesne	State/Province Utah	Basin		Field Name GMBU CTB8	
Well Start Date 8/25/2004		Spud Date 8/25/2004		Final Rig Release Date 9/8/2004	
Original KB Elevation (ft) 5,088		Ground Elevation (ft) 5,076		On Production Date 10/4/2004	
Total Depth (ftKB) 5,810.0		Total Depth All (TVD) (ftKB)		PBTD (All) (ftKB) Original Hole - 5,757.1	

### Casing Strings

Csg Des	Run Date	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)
Surface	8/27/2004	8 5/8	8.097	24.00	J-55	310
Production	9/8/2004	5 1/2	4.950	15.50	J-55	5,796

### Cement

#### String: Surface, 310ftKB 8/27/2004

Cementing Company BJ Services Company	Top Depth (ftKB) 12.0	Bottom Depth (ftKB) 310.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield	Fluid Type Lead	Amount (sacks) 150	Class G	Estimated Top (ftKB) 12.0

#### String: Production, 5,796ftKB 9/8/2004

Cementing Company BJ Services Company	Top Depth (ftKB) 40.0	Bottom Depth (ftKB) 5,810.0	Full Return?	Vol Cement Ret (bbl)
Fluid Description Premite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/4#s/sk Cello Flake .5%SM mixed @ 11.0 ppg W / 3.43 cf/sk yield	Fluid Type Lead	Amount (sacks) 300	Class PL II	Estimated Top (ftKB) 40.0
Fluid Description 50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD	Fluid Type Tail	Amount (sacks) 300	Class 50/50 Poz	Estimated Top (ftKB) 3,000.0

### Tubing Strings

Tubing Description Tubing		Run Date 6/11/2008			Set Depth (ftKB) 3,962.7		
Item Des	Jts	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)
Tubing	121	2 7/8	2.441	6.50	J-55	3,942.20	12.0
Pump Seating Nipple		2 7/8	2.441			1.10	3,954.2
AS1 Packer		4 5/8	2.441			7.40	3,955.3
							3,962.7

### Rod Strings

Rod Description		Run Date			Set Depth (ftKB)		
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Botm (ftKB)

### Perforation Intervals

Stage#	Zone	Top (ftKB)	Blm (ftKB)	Shot Dens (shots/ft)	Phasing (")	Norm Hole Dia (in)	Date
4	GB4, Original Hole	4,001	4,006	4	90		9/28/2004
4	GB4, Original Hole	4,016	4,022	4	90		9/28/2004
4	GB4, Original Hole	4,028	4,036	4	90		9/28/2004
3	C, Original Hole	4,673	4,696	4	90		9/28/2004
2	A1, Original Hole	4,978	4,983	4	90		9/28/2004
2	A1, Original Hole	4,987	4,991	4	90		9/28/2004
1	CP1, Original Hole	5,360	5,380	4	90		9/21/2004
1	CP2, Original Hole	5,422	5,432	4	90		9/21/2004

### Stimulations & Treatments

Stage#	ISIP (psi)	Frac Gradient (psi/ft)	Max Rate (bbl/min)	Max PSI (psi)	Total Clean Vol (bbl)	Total Slurry Vol (bbl)	Vol Recov (bbl)
1	1,425	0.7	24.8	1,390			
2	1,750	0.78	24.8	1,920			
3	2,000	0.86	24.8	2,000			
4	1,850	0.89	24.7	1,920			

### Proppant

Stage#	Total Prop Vol Pumped (lb)	Total Add Amount
1		Proppant Bulk sand 84815 lbs
2		Proppant Bulk sand 14525 lbs
3		Proppant Bulk sand 79746 lbs
4		Proppant Bulk sand 92446 lbs



# NEWFIELD



May 13, 2013

Ms. Sarah Roberts  
US EPA Region 8  
8ENF-UFO Deep Well UIC  
1595 Wynkoop Street  
Denver CO 80202

11-9S-17E

RE: 5 Year MIT  
Well: Federal 5-11-9-17  
EPA #: UT22197-07128  
API #: 43-013-32486

Dear Ms. Roberts:

A 5-year MIT was conducted on the subject well on 05/09/2013. Attached are the EPA tabular sheet and a copy of the chart. You may contact me at 435-646-4874 or [Ichavez-naupoto@newfield.com](mailto:Ichavez-naupoto@newfield.com) if you require further information.

Sincerely,

Lucy Chavez-Naupoto  
Water Services Technician



Sundry Number: 37854 API Well Number: 43013324860000

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>																														
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-79013																														
1. TYPE OF WELL Water Injection Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:																														
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)																														
3. ADDRESS OF OPERATOR: Rt 3 Box 3630, Myton, UT, 84052		8. WELL NAME and NUMBER: FEDERAL 5-11-9-17																														
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2000 FNL 0656 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 11 Township: 09.0S Range: 17.0E Meridian: S		9. API NUMBER: 43013324860000																														
9. FIELD and POOL or WILDCAT: MONUMENT BUTTE		COUNTY: DUCHESNE																														
STATE: UTAH																																
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA																																
TYPE OF SUBMISSION  <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion 5/9/2013  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	TYPE OF ACTION  <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> ACIDIZE</td> <td><input type="checkbox"/> ALTER CASING</td> <td><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td><input type="checkbox"/> CHANGE TUBING</td> <td><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td><input type="checkbox"/> CHANGE WELL STATUS</td> <td><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td><input type="checkbox"/> DEEPEN</td> <td><input type="checkbox"/> FRACTURE TREAT</td> <td><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td><input type="checkbox"/> OPERATOR CHANGE</td> <td><input type="checkbox"/> PLUG AND ABANDON</td> <td><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td><input type="checkbox"/> TUBING REPAIR</td> <td><input type="checkbox"/> VENT OR FLARE</td> <td><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> WATER SHUTOFF</td> <td><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td><input checked="" type="checkbox"/> OTHER</td> <td>OTHER: 5 YR MIT</td> </tr> </table>		<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: 5 YR MIT
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<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: 5 YR MIT																														
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Performed a 5 YR MIT on the above listed well. On 05/09/2013 the casing was pressured up to 1370 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tbp pressure was 975 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-07128																																
NAME (PLEASE PRINT) Lucy Chavez-Naupoto	PHONE NUMBER 435 646-4874	TITLE Water Services Technician																														
SIGNATURE N/A	DATE 5/13/2013																															

RECEIVED: May. 13, 2013



# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 5 / 9 / 2013  
 Test conducted by: BRENDAN CURRY  
 Others present: BRITT JENSEN, BART STUBBS, Inaki Lasa  
-07128

Well Name: <u>FEDERAL 5-11-9-17</u>	Type: <u>ER SWD</u>	Status: <u>AC TA UC</u>
Field: <u>GREATER MONUMENT BUTTE</u>		
Location: <u>5</u>	Sec: <u>11</u>	T <u>9</u> N <u>9</u> R <u>17</u> E / W County: <u>Duchesne</u> State: <u>UT</u>
Operator: <u>Newfield Production Company</u>		
Last MIT: <u>1</u>	Maximum Allowable Pressure: <u>1240</u>	PSIG

Is this a regularly scheduled test? ☒ Yes ☐ No  
 Initial test for permit? ☐ Yes ☒ No  
 Test after well rework? ☐ Yes ☒ No  
 Well injecting during test? ☐ Yes ☒ No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0/975 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING</b>	<b>PRESSURE</b>		
Initial Pressure	<u>975</u> psig	psig	psig
End of test pressure	<u>975</u> psig	psig	psig
<b>CASING / TUBING</b>	<b>ANNULUS</b>	<b>PRESSURE</b>	
0 minutes	<u>1370</u> psig	psig	psig
5 minutes	<u>1370</u> psig	psig	psig
10 minutes	<u>1370</u> psig	psig	psig
15 minutes	<u>1370</u> psig	psig	psig
20 minutes	<u>1370</u> psig	psig	psig
25 minutes	<u>1370</u> psig	psig	psig
30 minutes	<u>1370</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test? ☐ Yes ☒ No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



